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ABSTRACT

This tool kit begins with sections that define information literacy, identify information literacy skills, discuss the integration of information literacy into the K-12 curriculum, present an integration/collaboration model, and address collaboration between the school library information specialist and administrators or the instructional team, as well as school/public library cooperation. Charts show the integration of Pennsylvania academic standards into the AASL (American Association of School Librarians) information literacy standards and the integration of AASL information literacy standards into the Pennsylvania academic standards. Performance indicators for information literacy, independent learning, and social responsibility are identified as benchmarks for grades 3, 5, 8, and 11. An action plan for implementing information literacy standards is outlined, and a suggested library curriculum for benchmark grade levels three, five, and eight is presented. A student information literacy rubric offers an overview and framework based on the information literacy curriculum for one school district. Recommended collaboration and library research tools to assist school library information specialists to implement information literacy are provided. A glossary and a list of suggested professional journals are included. An AASL document on collaboration and Pennsylvania's "Proposed Academic Standards for Civics and Government" are appended. (Contains 118 references.) (MES)

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The Pennsylvania School Library Information Specialist

Tool Kit

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for Implementing Information Literacy in Schools

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TABLE OF CONTENTS

Page

Publications Committee ii

Introduction 1

Information Literacy Skills 2

Integration 3

Integration/Collaboration Model 4

Collaboration 5

Integration of Pennsylvania Academic Standards
into the AASL Information Literacy Standards 9

Integration of AASL Information Literacy Standards
into Pennsylvania Academic Standards 26

Benchmarks 35

Action Plan for Implementing Information Literacy Standards 39

Road to Excellence 41

Action Plan for Implementing Information Literacy Standards 1, 2, 3 45

Action Plan for Implementing Information Literacy Standards 4, 5, 6 48

Action Plan for Implementing Information Literacy Standards 7, 8, 9 50

Curriculum 51

Student Information Literacy Rubric 77

Suggested "Tools" 85

Collaboration Tools 87

Library Research Tools 96

Glossary 111

References and Recommended Reading 115

Suggested Professional Journals 123

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INTRODUCTION

The goal of the school library information specialist in the 21st century is to develop a student-centered program that focuses on life-long learning. Students need to be prepared for the vast amount of information now available in this global society. They must become proficient in accessing, evaluating, analyzing and synthesizing information that comes in a variety of formats.

The role of the school library information specialist is continually evolving. The school library information specialist is a teacher, a facilitator for learning, a trainer in the use of technologies and a leader in curriculum development. As an instructional partner, the school library information specialist collaborates with the entire school community to develop integrated units of study that support and extend the curriculum and meet individual needs. The school library information specialist provides leadership and expertise in acquiring and evaluating resources. Finally, as a program administrator, the school library information specialist promotes library programs, activities, and handles management tasks. (*Information Power* 4-5)

The purpose of this document, *The Pennsylvania School Library Information Specialist's Tool Kit for the Implementation of Information Literacy* is to define information literacy standards as outlined in *Information Power*, to develop guidelines for integrating these standards into the various curriculum areas based on the *Pennsylvania Academic Standards*, to establish benchmarks, and to provide methods of assessment and evaluation.

INFORMATION LITERACY SKILLS

Information literacy is defined as the ability to:

- recognize the need for information;
- identify and locate information sources;
- evaluate the quality of information obtained; and
- organize and use information effectively. (Eisenberg and Berkowitz 1)

The information literate student can effectively:

- access library resources for a variety of reasons, i.e., to meet individual needs, to complete curriculum-related activities, to carry out independent study and for personal use;
- develop a search strategy;
- select appropriate print and electronic sources;
- analyze the information for relevance, quality, timeliness, accuracy, and authority;
- apply the information appropriately; and
- evaluate the process and the product. (*Information Power)*

INTEGRATION

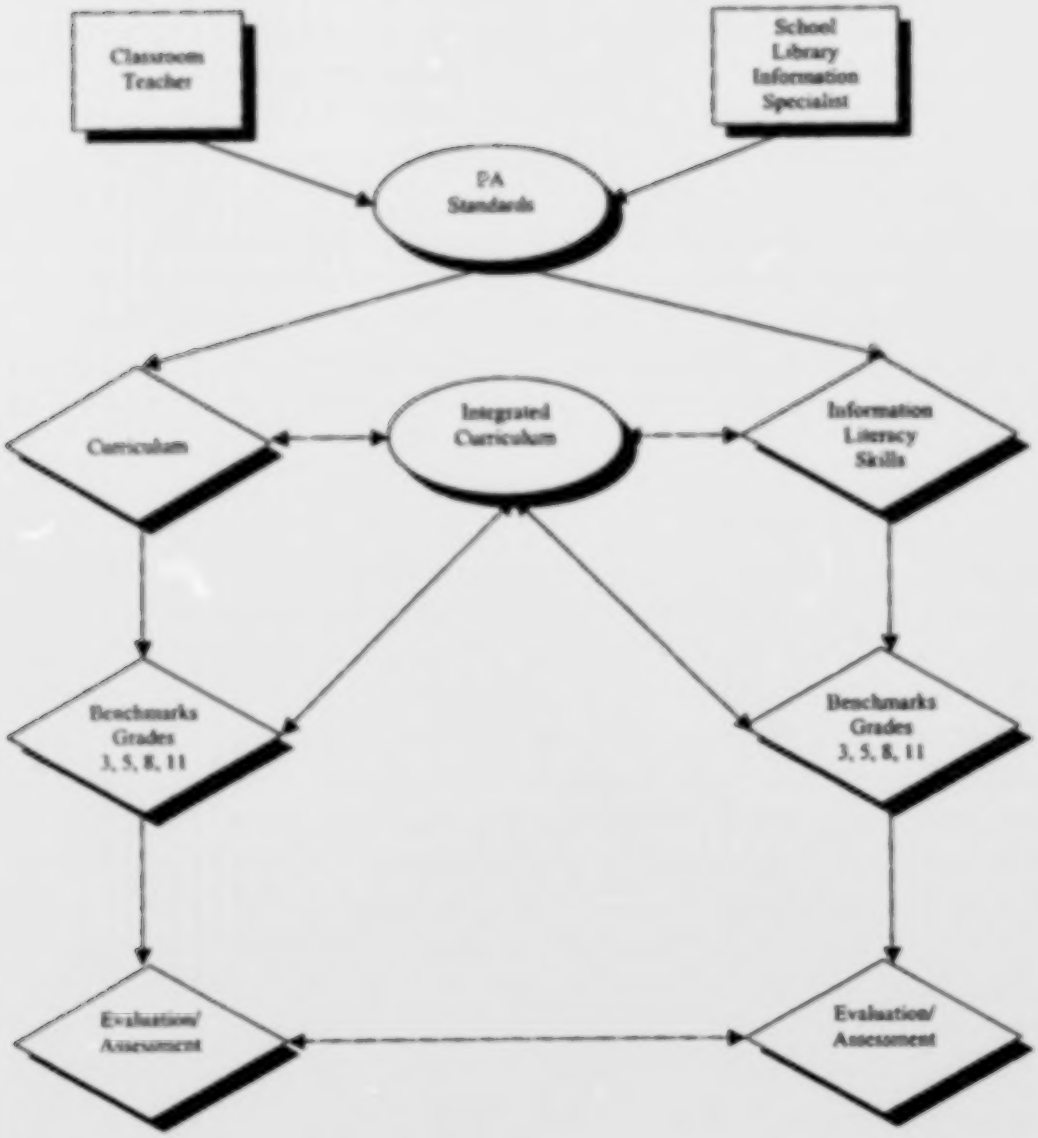
Pennsylvania's new Academic Content Standards in 22 Pennsylvania Code, Chapter 4 provide a foundation for curriculum development, with the planned course serving as a framework for the integration of indispensable life-long learning skills. The scope and sequence of how information literacy skills are integrated with K-12 curriculum needs to be jointly planned, delivered and evaluated by school library information specialists and teachers, with the support for curriculum development by school boards and administrators. While skills must be taught and reinforced as needed within the classroom curriculum, school library information specialists must ensure that all students are taught, have time to practice, and learn all the information skills as outlined in *Information Power*. This requires extensive and active planning, preparation and coordination with teachers and their written planned courses of classroom content instruction.

The integrated approach permits students to develop information literacy skills as the need for these skills naturally emerges from the curriculum. The school library information professional and the classroom teacher are partners in the instructional process, jointly planning, implementing and evaluating instructional activities so academic standards and essential information literacy skills can be achieved.

Multidisciplinary learning activities that include information literacy skills reflect the multifaceted nature of learning. Information literacy skills are integrated into the subject areas with problem solving as the focus. This approach encourages transfer of learning to real-world problems and the collaborative nature of learning.

Such integration and collaboration requires comprehensive support for the school library information program. This can be accomplished by adequate staff and facilities, program of collection development and maintenance, and sound budgetary commitment and management. It also requires support for flexible scheduling and collaborative planning. *(Pennsylvania Guidelines for School Library Information Programs 9)*

INTEGRATION/COLLABORATION MODEL



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COLLABORATION

"Collaboration -- working with others -- is a key theme in building partnerships for learning." (*Information Power* 50) The school library information specialist should take the initiative to begin the process of collaboration by establishing an effective working relationship with the school's administration and teaching staff.

Collaboration is essential as school library information specialists work with teachers to plan, conduct and evaluate learning activities that incorporate information literacy skills. It is critical that they work with administrators and teachers to build and manage collections that include all formats and that support authentic information-based learning. It is also important that they work with administrators, teachers, parents and other members of the learning community to plan, design and implement programs that provide access to the information that is required to meet the learning goals of students and teachers.

COLLABORATIVE EFFORTS WITH ADMINISTRATORS

An effective school library information program requires ongoing administrative support. The school library information specialist should communicate regularly with administrators regarding his/her program and how it contributes to student learning. Administrators can help by appointing the school library information specialist to curriculum committees. Such an appointment establishes the school library information specialist as a teaching colleague involved in curriculum decisions and provides the opportunity for the school library information specialist to contribute to the integration of information literacy skills into all subject areas and to recommend appropriate resources. Planning time then needs to be provided for a teacher and the school library information specialist to develop units that integrate these skills and resources.

In a student-centered school library information program, learning needs to take precedence over class schedules and school hours. To meet these needs, the program requires flexible and equitable access so that information and ideas can be accessed at the point of need. The school library information specialist encourages free, timely and easy access to resources, services and facilities. Administrators and the school board may need to provide financial support for extended hours for the school library to be open beyond the school day and/or for home access to electronic resources to which the library subscribes. Flexible schedules can also allow the school library information specialist more opportunities for collaborative planning with teachers.

COLLABORATIVE EFFORTS WITH INSTRUCTIONAL TEAM

Collaboration with members of the instructional team requires an active and genuine effort on the part of all involved. Collaboration is often used to mean cooperation or coordination. However, there are big differences among these three terms. Cooperation is informal, with no commonly defined goals or planning effort. Information is shared as needed. When a school library information specialist and teacher work in a cooperative relationship, each works independently but then they come together briefly for mutual benefit.

Coordination suggests a more formal working relationship. Some planning is required. The teacher and the school library information specialist make arrangements to plan and teach a lesson or unit and a closer working relationship is required.

Collaboration is a much more long-term and interdependent effort. Goals are shared. Roles are carefully defined. Comprehensive planning is required. Communication is conducted at many levels to ensure success, including planning, implementing and evaluation. Leadership, resources, risk, control and results are shared.

In the publication, *Collaboration Lessons Learned,* Winer and Ray define ten benefits necessary for collaboration.(7)

1. Students are more involved in learning, and their work is more creative.
2. Collaboration "ignites" creativity among teachers, and the "creative fire" spreads to learners.
3. Modeling collaboration results in more collaboration among faculty in the school.
4. Modeling collaboration influences students, teachers and parents, who learn to share ideas.
5. Teachers, principals and librarians communicate more frequently.
6. When students work in teams, the role of the teacher changes to that of resource person and learning facilitator.
7. When students work in groups, the student's role changes also.
8. Students learn to interact with people outside of the school.
9. The library media program is integral to the collaborative teaching model.
10. Administrators benefit professionally from their participation in teaching teams.

Linda Wolcott in her article, "Planning With Teachers: Practical Approaches to Collaboration," suggests the following practical approaches to collaborating:

- establish a good relationship with teachers; be approachable;
- raise teachers' expectations of what the school library media program can do;
- become an expert on the curriculum's goals;
- show the connections between information literacy and content-related objectives;
- solicit teachers' assistance in library media program development;
- be flexible in expectations and timing; and
- be persistent. (9-14)

SCHOOL LIBRARY/PUBLIC LIBRARY COOPERATION

Advocating cooperation between school libraries and public libraries is not a new concept. For decades, librarians on both sides of the professional fence have been talking about the need to cooperate. Unfortunately, in most instances, the librarians merely paid lip service to the concept and actually did little to implement cooperative ventures.

This inertia is ending in Pennsylvania as school library information specialists and public librarians learn that cooperating or partnering is not just "the right thing to do." Cooperating is a professional responsibility.

In 1999, Keith Curry Lance, in conjunction with the State Library of Colorado, conducted a survey measuring various library conditions that effect student learning. The survey determined that when school libraries and public libraries really cooperate, student-reading scores increase by fifteen points. Improving reading scores is an important part of every school's mission in which the library program plays a big part, just as promoting life-long learning is an integral part of a public library's mission. Cooperation and partnering help accomplish both of these vital goals.

The Office of Commonwealth Libraries, Pennsylvania Department of Education, shares the commitment to multi-type library cooperation and partnering. School libraries and public libraries that join the ACCESS Pennsylvania POWER Library project and receive free access to selected electronic reference and periodical databases must sign an application agreeing to cooperate with their school or public library partner. Partnering is not an option; it is required.

The success of the biannual school library/public library cooperation conferences sponsored by the Office of Commonwealth Libraries lends credence to the belief that Pennsylvania's school and public libraries are aware of the need to cooperate with each other. Attendance at the conferences has increased dramatically and the resulting partnership projects are impressive.

School library/public library cooperation ensures that citizens and students have ample opportunities to learn and share ideas and have access to print, nonprint and electronic resources when needed. The concept is here to stay and Pennsylvania's librarians are accepting the challenge.

COOPERATION	COORDINATION	COLLABORATION
Short term	Longer term	Long term
Informal relationships	More formal relationships	More pervasive relationships
No clearly defined mission	Understand mission	Commitment to a common mission
No defined structure	Focus on a specific effort or program	Results in a new structure
No planning effort	Some planning	Comprehensive planning
Partners share the information about the project at hand	Open communication channels	Well defined communication channels at all levels
Individuals retain authority	Authority still retained by individuals	Collaborative structure determines authority
Resources are maintained separately	Resources are shared	Resources and rewards are shared
No risk	Power can be an issue	Greater risk, power is an issue
Lower intensity	Some intensity	Higher intensity

Source: Winer, Michael and Karen Ray. *Collaboration Handbook: Creating, Sustaining, and Enjoying the Journey.* St. Paul, MN: Wilder Foundation, 1994 (22)

INTEGRATION OF PA ACADEMIC STANDARDS FOR READING, WRITING, SPEAKING AND LISTENING INTO THE AASL INFORMATION LITERACY STANDARDS

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
1.1	**Learning to read independently**	
1.1.A	Identify and establish the purpose for reading	Standard 1 Indicator 1 (1.1)
1.1.B	Identify and use common organizational structures, e.g., index, table of contents, to comprehend information	1.5
1.1.D	Identify basic facts and ideas in text using specific strategies, e.g., predictions	1.5, 2.4
1.1.G	Demonstrate after reading understanding and interpretation of both fiction and nonfiction text	1.4, 2.2, 3.2, 5.1
1.1.H	Demonstrates fluency and comprehension in reading (recommends 25 books/year)	5.1
1.2	**Reading critically in all content areas**	
1.2.A	Read and understand essential content of informational texts and documents in all academic areas	1.2, 2.1, 2.2, 2.3, 2.4, 3.2, 3.3
1.2.B	Use and understand a variety of media and evaluate the quality of material produced	1.5, 3.1, 3.3, 3.4, 5.2, 5.3, 7.1
1.2.C	Produces work in at least one literary genre which follows the conventions of the genre	5.3
1.3	**Reading, analyzing and interpreting literature**	
1.3.A	Read and understand works of literature	5.1
1.3.B	Identify and analyze the use of literary elements	3.2, 5.1, 5.2
1.3.C	Identify, describe, and analyze the effect of various literary devices	5.1
1.3.D	Identify the effects of sound and structure in poetry, e.g., pattern books	5.1

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PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
1.3.E	Identify and analyze drama	5.2
1.3.F	Read and respond to nonfiction and fiction, including poetry and drama	5.1, 5.2
1.4	**Types of writing**	
1.4.A	Write narrative pieces, e.g., stories, poems, plays	3.4, 5.3
1.4.B	Write informational pieces, using graphics when relevant	2.4, 3.1, 3.2, 3.3, 3.4, 4.2, 5.3
1.4.C	Write persuasive pieces	2.4, 3.1, 3.2, 3.3, 3.4, 4.2, 5.3, 8.2
1.5	**Quality of writing**	
1.5.B	Write using well-developed content appropriate for the topic	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.2, 5.3, 7.1, 8.3
1.5.E	Revise writing to improve detail and order by identifying missing information	6.1, 6.2
1.5.G	Present and/or defend written work for publication when appropriate	4.2, 6.1
1.6	**Speaking and listening**	
1.6.A	Listen to others	1.2, 1.3, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 5.2, 9.1, 9.2, 9.3
1.6.B	Listen to selections of literature (fiction and/or nonfiction)	3.2, 3.3, 5.1, 5.2
1.6.C	Speak using skills appropriate to formal speech situations	3.4, 4.2, 5.3
1.6.D	Contribute to discussions	1.3, 2.1, 2.3, 3.2, 3.3, 8.1, 9.1, 9.2, 9.3
1.6.E	Participates in small and large group discussions and presentations	2.1, 2.4, 3.4, 4.2, 5.3, 8.1, 9.1, 9.2, 9.3, 9.4
1.6.F	Use media for learning purposes	1.2, 1.4, 2.1, 2.2, 2.3, 3.2, 3.3, 3.4, 4.1, 4.2, 5.2, 5.3, 7.1, 7.2, 8.1, 8.2, 8.3, 9.3, 9.4

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PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
1.8	**Research**	
1.8.A	Select and refine a topic for research	1.1, 1.3, 3.2, 4.1
1.8.B	Locate information using appropriate sources and strategies	1.1, 1.2, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.2, 3.3, 4.1, 5.2, 6.1, 6.2, 7.1, 7.2, 8.3
1.8.C	Organize, summarize and present the main ideas from the research	2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.2, 5.3, 6.1, 6.2, 8.2

INTEGRATION OF PA ACADEMIC STANDARDS FOR MATHEMATICS INTO THE AASL INFORMATION LITERACY STANDARDS

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
2.1	**Numbers, number systems and number relationships**	Standard 1 Indicator 1 (1.1), 1.2, 1.4, 1.5, 2.1, 2.4, 3.1, 3.2, 3.3, 6.1, 6.2
2.1.5.A	Use expanded notation to represent whole numbers or decimals	
2.1.5.D	Use models to represent fractions and decimals	
2.1.8.A	Represent and use numbers in equivalent forms, e.g., fractions, decimals	
2.2	**Computation and estimation**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 5.3, 6.1, 6.2
2.3	**Measurement and estimation**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 5.3, 6.1, 6.2
2.4	**Mathematical reasoning and connections**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.2, 6.1, 6.2
2.4.5.E	Interpret statements made with precise language of logic, e.g. "and", "or"	
2.5	**Mathematical problem solving and communication**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 5.3, 6.1, 6.2
2.5.3.A	Use appropriate problem solving strategies such as guess and check and working backward	
2.5.3.B	Select and use an appropriate method, materials strategy to solve problems, including mental mathematics, paper and pencil and concrete objects	
2.5.5.C	Show ideas in a variety of ways, including words, numbers, symbols, pictures, charts, graphs, tables, diagrams, and models	

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PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
2.6	**Statistics and data analysis**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.2, 5.3, 6.1, 6.2
2.6.5.A	Organize and display data using pictures, tallies, tables, charts, bar graphs and circle graphs	
2.6.5.C	Sort data using Venn diagrams	
2.6.11.B	Use appropriate technology to organize and analyze data taken from the local community	
2.7	**Probability and predictions**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.4, 3.1, 3.2, 3.3, 3.4, 5.3, 6.1, 6.2
2.7.3.D	Analyze data using the concepts of largest, smallest, most often, least often and middle	
2.7.5.D	Compare predictions based on theoretical probability and experimental results	
2.7.5.G	Determine the probability of an event involving "and", "or", or "not"	
2.7.8.B	Present the results of an experiment using visual representations, e.g. tables, charts and graphs	
2.8	**Algebra and functions**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 5.3, 6.1, 6.2
2.8.3.A	Recognize, describe, extend, create and replicate a variety of patterns including attribute, activity, number and geometric patterns	
2.8.3.G	Gather information and display it in the form of a table or a chart	
2.8.5.A	Recognize, reproduce, extend, create and describe patterns, sequences and relationships verbally, numerically, symbolically and graphically, using a variety of materials	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
2.9	**Geometry**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 5.3, 6.1, 6.2
2.9.3.A	Name and label geometric shapes in two and three dimensions	
2.9.3.D	Find and describe geometric figures in real life	
2.9.3.H	Show relationships between and among figures using reflections	
2.10	**Trigonometry**	1.1, 1.2, 1.5, 2.1, 2.4, 3.1, 3.2, 3.4, 6.1, 6.2
2.11	**Concepts of calculus**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 6.1, 6.2
2.11.5.A	Make comparisons of numbers such as more, less, same, least, most, greater than and less than	

INTEGRATION OF *PROPOSED* PA ACADEMIC STANDARDS FOR SCIENCE AND TECHNOLOGY INTO THE AASL INFORMATION LITERACY STANDARDS

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
3.5	**Technology**	
3.5.B	Explain, apply and analyze informational technologies of encoding, transmitting, receiving, storing, retrieving, and decoding	Standard 2 Indicator 4 (2.4) 3.1, 3.2, 3.3, 3.4, 4.2, 5.3, 8.2, 8.3
3.6	**Technological devices**	
3.6.A	Explore, identify and apply tools, materials and techniques to solve problems and answer questions	1.1, 1.3, 1.4, 1.5, 2.1, 2.4, 3.2, 3.3, 4.2, 6.1, 8.3
3.6.C	Explain, apply, and evaluate computer operations and concepts to solve specific problems	1.1, 2.4, 3.2, 3.3. 6.1, 8.3
3.6.D	Apply, utilize, and evaluate computer software to solve specific problems	1.1, 2.4, 3.1, 3.2, 3.3, 3.4, 4.2, 5.3, 8.2, 8.3
3.6.E	Identify, explain, apply, and assess computer communications systems	1.1, 1.3, 1.4, 1.5, 2.1, 2.4, 3.2, 3.3, 6.1, 8.3, 9.3, 9.4
3.7	**Inquiry**	
3.7.A	Identify, explain and apply the elements of scientific research to solve problems	1.1, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 6.1
3.7.B	Apply problem solving in technology as a systematic process	1.1, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3
3.9	**Science, Technology, and Human Endeavors**	
3.9.B	Explain and apply ingenuity and technological resources to solve specific societal needs and improve the quality of life	1.1, 1,3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4,1, 4.2, 5.3, 6.1

INTEGRATION OF *PROPOSED* PA ACADEMIC STANDARDS FOR ENVIRONMENT AND ECOLOGY INTO THE AASL INORMATION LITERACY STANDARDS

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.1.4	**Watersheds and Wetlands**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4
4.1.4.A.	Identify various types of water environments	
4.1.4.B.	Explain the differences between moving and still water	
4.1.4.C.	Identify living things found in water environments	
4.1.4.D.	Identify a wetland and the plants and animals found there	
4.1.4.E.	Recognize the impact of watersheds and wetlands on animals and plants	
4.1.7.	**Watersheds and Wetlands**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 8.2, 8.3, 9.1. 9.4
4.1.7.A.	Explain the role of the water cycle within a watershed	
4.1.7.B.	Understand the role of the watershed	
4.1.7.C.	Explain the effects of water on the life of organisms in a watershed	
4.1.7.D.	Explain and describe characteristics of a watershed	
4.1.7 E.	Describe the impact of watersheds and wetlands on people	
4.1.10	**Watersheds and Wetlands**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.1.10.A.	Describe changes that occur from a stream's origin to its final flow	
4.1.10.B.	Explain the relationship among landforms, vegetation and the amount and speed of water	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.1.10.C.	Describe the physical characteristics of a stream and determine the types of organisms found in aquatic environments	
4.1.10.D.	Describe the multiple functions of wetlands	
4.1.10.E.	Identify and describe natural and human events on watersheds and wetlands	
4.1.12	**Watersheds and Wetlands**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.3, 9.4
4.1.12.A.	Categorize stream order in a watershed	
4.1.12.B.	Explain the relationships that exist within watersheds in the United States	
4.1.12.C.	Analyze the parameters of a watershed	
4.1.12.D.	Analyze the complex and diverse ecosystems of wetlands	
4.1.12.E.	Evaluate the trade-off, costs and benefits of conserving wetlands	
4.2.4	**Renewable and Nonrenewable Resources**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4
4.2.4.A.	Identify needs of people	
4.2.4.B.	Identify products derived from natural resources	
4.2.4.C.	Know that some natural resources have limited life spans	
4.2.4.D.	Identify by-products and their use of natural resources	
4.2.7	**Renewable and Nonrenewable Resources**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 8.2, 8.3, 9.1, 9.4
4.2.7.A.	Know that raw materials come from natural resources	
4.2.7.B.	Examine the renewability of the resources	
4.2.7.C.	Explain natural resource distribution	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.2.7.D	Describe the role of recycling and waste management	
4.2.10	**Renewable and Nonrenewable Resources**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.2.10.A	Explain that renewable and nonrenewable resources supply energy and materials	
4.2.10.B	Evaluate factors affecting availability of natural resources	
4.2.10.C	Analyze how man-made systems have impacted the management and distribution of natural resources	
4.2.10.D	Explain different management alternatives involved in recycling and solid management	
4.2.12	**Renewable and Nonrenewable Resources**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2 8.3, 9.1, 9.3, 9.4
4.2.12.A	Analyze the use of renewable and nonrenewable resources	
4.2.12.B	Analyze factors affecting the availability of renewable and nonrenewable resources	
4.2.12.C	Analyze factors that influence the availability of natural resources	
4.2.12.D	Evaluate solid waste management practices	
4.3.4	**Environmental Health**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4
4.3.4.A	Know that plants, animals, and humans are dependent on air and water	
4.3.4.B	Identify how human actions affect environmental health	
4.3.4.C	Understand that the elements of natural systems are interdependent	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.3.7	**Environmental Health**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 8.2, 8.3, 9.1, 9.4
4.3.7.A.	Identify environmental health issues	
4.3.7.B.	Describe how human actions affect the health of the environment	
4.3.7.C.	Explain biological diversity	
4.3.10	**Environmental Health**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.3.10.A.	Describe environmental health issues	
4.3.10.B.	Explain how multiple variables determine the effects of pollution on environmental health, natural processes and human practices	
4.3.10.C.	Explain biological diversity as an indicator of a healthy environment	
4.3.12	**Environmental Health**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.3, 9.4
4.3.12.A.	Analyze the complexity of environmental health issues	
4.3.12.B.	Analyze the local, regional and national impacts of environmental health	
4.3.12.C.	Analyze the need for a healthy environment	
4.4.4	**Agriculture and Society**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 8.2, 8.3, 9.1, 9.4
4.4.4.A.	Explain society's standard of living in relation to agriculture	
4.4.4.B.	Explain agricultural system's use of natural and human resources	
4.4.4.C.	Explain the improvement of agricultural production through technology	

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PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.4.10	**Agriculture and Society**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.4.10.A.	Describe the importance of agriculture to society	
4.4.10.B.	Explain the functions of the components of the food and fiber system	
4.4.10.C.	Analyze the efforts of increased efficiency in agriculture through technology	
4.4.12	**Agriculture and Society**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.3, 9.4
4.4.12.A.	Analyze the management practices in the agricultural business	
4.4.12.B.	Analyze and research the social, political and economic factors that affect agricultural systems	
4.4.12.C.	Analyze research development activities as they relate to agriculture	
4.5.4	**Integrated Pest Management**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4
4.5.4.A.	Know types of pests	
4.5.4.B.	Explain pest control	
4.5.4.C.	Understand society's need for integrated pest management	
4.5.7	**Integrated Pest Management**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4, 4.1, 8.2, 8.3, 9.1, 9.4
4.5.7.A.	Explain benefits and harmful effects of pests	
4.5.7.B.	Explain how pest management affects the environment	
4.5.7.C.	Explain various integrated management practices used in society	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.5.10	**Integrated Pest Management**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.5.10.A.	Identify similar classifications of pests that may or may not have similar effects on different regions	
4.5.10.B.	Analyze health benefits and risks associated with integrated pest management	
4.5.10.C.	Determine the effects of integrated pest management practices on society over time	
4.5.12	**Integrated Pest Management**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.3, 9.4
4.5.12.A.	Research integrated pest management systems	
4.5.12.B.	Research and analyze pest management practices globally	
4.5.12.C.	Analyze the historical significance of integrated pest management of society	
4.6.4	**Ecosystems and Their Interactions**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4
4.6.4.A.	Understand that living things are dependent on nonliving things in the environment for survival	
4.6.4.B.	Explain the concept of cycles	
4.6.4.C.	Identify how ecosystems change over time	
4.6.7	**Ecosystems and Their Interactions**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1 3.2, 3.3, 3.4, 4.1, 8.2, 8.3, 9.1, 9.4
4.6.7.A.	Explain the flows of energy and matter from organism to organism within an ecosystem	
4.6.7.B.	Explain the concepts of cycles	
4.6.7.C.	Explain how ecosystems change over time	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.6.10.	**Ecosystems and Their Interactions**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.6.10.A.	Explain the biotic and abiotic components of an ecosystem and their interaction	
4.6.10.B.	Explain how cycles affect the balance in an ecosystem	
4.6.10.C.	Analyze how ecosystems change over time	
4.6.12	**Ecosystems and Their Interactions**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2, 9.1, 9.3, 9.4
4.6.12.A.	Analyze the interdependence of an ecosystem	
4.6.12.B.	Analyze the impact of cycles on the ecosystem	
4.6.12.C.	Analyze how human action and natural changes affect the balance within an ecosystem	
4.7.4	**Threatened, Endangered and Extinct Species**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4
4.7.4.A.	Identify differences in living things	
4.7.4.B.	Know that adaptations are important for survival	
4.7.4.C.	Define and understand extinction	
4.7.7	**Threatened, Endangered and Extinct Species**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 8.2, 9.1, 9.4
4.7.7.A.	Describe diversity of plants and animals in ecosystems	
4.7.7.B.	Explain how species of living organisms adapt to their environment	
4.7.7.C.	Explain natural or human actions in relation to the loss of species	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.7.10	**Threatened, Endangered and Extinct Species**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.7.10.A.	Explain the significance of diversity in ecosystems	
4.7.10.B.	Explain how structure, function and behavior of plants and animals affect their ability to survive	
4.7.10.C.	Identify and explain why adaptations can lead to specialization	
4.7.12	**Threatened, Endangered and Extinct Species**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.3, 9.4
4.7.12.A.	Analyze biological diversity as it relates to the stability of an ecosystem	
4.7.12.B.	Examine the effects of extinction, both natural and human caused, on the environment	
4.7.12.C.	Analyze the effects of threatened, endangered, or extinct species on human and natural systems	
4.8.4	**Humans and the Environment**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4
4.8.4.A.	Identify the biological requirements of humans	
4.8.4.B.	Know that environmental conditions influence where and how people live	
4.8.4.C.	Explain how human activities may change the environment	
4.8.4.D.	Know the importance of natural resources in daily life	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.8.10	**Humans and the Environment**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.8.10.A.	Analyze how society's needs relate to the sustainability of natural resources	
4.8.10.B.	Analyze the relationship between the use of natural resources and sustaining our society	
4.8.10.C.	Analyze how human activities cause changes in an ecosystem	
4.8.10.D.	Explain how the concept of supply and demand affects the environment	
4.8.12	**Humans and the Environment**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.3, 9.4
4.8.12.A.	Explain how technology has influenced the sustainability of natural resources over time	
4.8.12.B.	Analyze technology's role on natural resource sustainability	
4.8.12.C.	Analyze the international implications of environmental occurrences	
4.8.12.D.	Analyze the international implications of environmental occurrences	
4.9.4	**Environmental Laws and Regulations**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.4
4.9.4.A.	Know that there are laws and regulations for the environment	
4.9.7	**Environmental Laws and Regulations**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 8.2, 8.3, 9.1, 9.4
4.9.7.A.	Explain the role of environmental laws and regulations	

PA ACADEMIC STANDARDS		INFORMATION LITERACY STANDARDS FOR STUDENT LEARNING *(Information Power)*
4.9.10	**Environmental Laws and Regulations**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.4
4.9.10.A.	Explain why environmental laws and regulations are developed and enacted	
4.9.12	**Environmental Laws and the Environment**	1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2, 5.3, 6.1, 6.2, 7.1, 8.2, 8.3, 9.1, 9.3, 9.4
4.9.12.A	Analyze environmental laws and regulations as they relate to environmental issues.	

INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	Math	Science Technology *(Proposed)*	Ecology Environment *(Proposed)*
Standard 1 The student who is information literate accesses information efficiently and effectively				
1.1 Recognizes the need for information	1.8.A, 1.8.B	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	3.6.A, 3.6.C, 3.6.D	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4,3,4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12
1.2 Recognizes that accurate and comprehensive information is the basis for intelligent decision making	1.6.A, 1.6.D, 1.8.B	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11		4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12
1.3 Formulates questions based on information needs	1.6.A, 1.6.D, 1.8.A	2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.9, 2.11	3.6.A	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12
1.4 Identifies a variety of potential sources information	1.6.F, 1.8.B	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.11	3.6.A	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12
1.5 Develops and uses successful strategies for locating information	1.8.B	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	3.6.A	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12,4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12

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INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	Math	Science Technology *(Proposed)*	Ecology Environment *(Proposed)*
Standard 2 The student who is information literate evaluates information critically and competently				
2.1 Determines accuracy, relevance, and comprehensiveness	1.2.A, 1.5.B, 1.6.A, 1.6.E, 1.8.B, 1.8.C	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	3.6.A	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12
2.2 Distinguishes among fact, point of view, and opinion	1.1.G, 1.2.A, 1.5.B, 1.6.A, 1.6.E, 1.8.B, 1.8.C	2.6		4.1.10, 4.1.12, 4.2.10, 4.2.12, 4.3.10, 4.3.12, 4.4.10, 4.4.12, 4.5.10, 4.5.12, 4.6.10, 4.6.12, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.10, 4.9.12
2.3 Identifies inaccurate and misleading information	1.2.A, 1.5.B, 1.6.A, 1.6.D, 1.6.E, 1.8.B, 1.8.C	2.2, 2.3, 2.4, 2.5, 2.6, 2.8, 2.9, 2.11		4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12
2.4 Selects information appropriate to the problem or question at hand	1.1.D, 1.2.B, 1.4.B, 1.4.C, 1.5.B, 1.6.A, 1.6.E, 1.8.B, 1.8.C	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	3.5.B, 3.6.A, 3.6.C	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12

INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	**Math**	**Science Technology** ***(Proposed)***	**Ecology Environment** ***(Proposed)***
Standard 3 The student who is information literate uses information accurately and creatively				
3.1 Organizes information for practical application	1.2.B, 1.4.B, 1.4.C, 1.5.B, 1.6.A, 1.8.C	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	3.5.B, 3.6.D	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12
3.2 Integrates new information into one's own knowledge	1.1.G, 1.2.A, 1.3.B, 1.4.B, 1.4.C, 1.5.B, 1.6.A, 1.6.B, 1.6.D, 1.6.F, 1.8.A, 1.8.B, 1.8.C	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 29, 2.10, 2.11	3.5.B, 3.6.A, 3.6.C, 3.6.D	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12
3.3 Applies information in critical thinking and problem solving	1.2.A, 1.5.B, 1.6.A, 1.6.D, 1.6.E, 1.8.B, 1.8.C	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.11	3.5.B, 3.6.A, 3.6.C, 3.6.D	4.1.7, 4.1.10, 4.1.12, 4.2.7, 4.2.10, 4.2.12, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.10, 4.5.12, 4.6.7, 4.6.10, 4.6.12, 4.7.7, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.7, 4.9.10, 4.9.12
3.4 Produces and communicates information and ideas in appropriate formats	1.1.D, 1.2.B, 1.4.B, 1.4.C, 1.5.B, 1.6.A, 1.6.E, 1.8.B, 1.8.C	2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	3.5.B, 3.6.D	4.1.4, 4.1.7, 4.1.10, 4.1.12, 4.2.4, 4.2.7, 4.2.10, 4.2.12, 4.3.4, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.4, 4.5.7, 4.5.10, 4.5.12, 4.6.4, 4.6.7, 4.6.10, 4.6.12, 4.7.4, 4.7.7, 4.7.10, 4.7.12, 4.8.4, 4.8.10, 4.8.12, 4.9.4, 4.9.7, 4.9.10, 4.9.12

INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	Math	Science Technology *(Proposed)*	Ecology Environment *(Proposed)*
Standard 4 The student who is an independent learner is information literate and pursues information related to personal interests				
4.1 Seeks information related to various dimensions of personal well-being, such as career interests, community involvement, health matters and recreational pursuits	1.8.A, 1.8.B, 1.6.F	2.6		4.1.7, 4.1.10, 4.1.12, 4.2.7, 4.2.10, 4.2.12, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.7, 4.5.10, 4.5.12, 4.6.7, 4.6.10, 4.6.12, 4.7.7, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.7, 4.9.10, 4.9.12
4.2 Designs, develops, and evaluates information products and solutions related to personal interests	1.4.B, 1.4.C, 1.5.B, 1.8.C, 1.6.E, 1.6.F, 1.5.G	2.4, 2.6	3.5.B, 3.6.A, 3.6.D	4.1.10, 4.1.12, 4.2.10, 4.2.12, 4.3.10, 4.3.12, 4.4.10, 4.4.12, 4.5.10, 4.5.12, 4.6.10, 4.6.12, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.10, 4.9.12

INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	Math	Science Technology *(Proposed)*	Ecology Environment *(Proposed)*
Standard 5 The student who is an independent learner is information literate and appreciates literature and other creative expressions of information				
5.1 Is a competent and self-motivated reader	1.1.G, 1.1.H, 1.3.A, 1.3.B, 1.3.C, 1.3.D, 1.3.F, 1.6.B			
5.2 Derives meaning from information of view, and opinion	1.2.B, 1.3.B, 1.3.E, 1.3.F, 1.6.A, 1.6.B, 1.8.B, 1.6.F	2.6		
5.3 Develops creative products in a variety of formats	1.2.B, 1.2.C, 1.4.A, 1.4.B, 1.5,B, 1.6.C, 1.6.E, 1.8.C, 1.6.F	2.2, 2.3, 2.5, 2.6, 2.7, 2.8, 2.9	3.5.B, 3.6.D	4.1.12, 4.2.12, 4.3.12, 4.4.12, 4.5.12, 4.6.12, 4.7.12, 4.8.12, 4.9.12

INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	**Math**	**Science Technology** ***(Proposed)***	**Ecology Environment** ***(Proposed)***
Standard 6 The student who is an independent learner is information literate and strives for excellence in information seeking and knowledge generation				
6.1 Assesses the quality of the process and products of personal information seeking	1.5.E, 1.5.G, 1.8.B, 1.8.C	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11	3.6.A, 3.6.C	4.1.10, 4.1.12, 4.2.10, 4.2.12, 4.3.10, 4.3.12, 4.4.10, 4.4.12, 4.5.10, 4.5.12, 4.6.10, 4.6.12, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.10, 4.9.12
6.2 Devises strategies for revising, improving and updating self-generated knowledge	1.5.E, 1.8.B, 1.8.C	2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11		4.1.10, 4.1.12, 4.2.10, 4.2.12, 4.3.10, 4.3.12, 4.4.10, 4.4.12, 4.5.10, 4.5.12, 4.6.10, 4.6.12, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.10, 4.9.12

INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	Math	Science Technology *(Proposed)*	Ecology Environment *(Proposed)*
Standard 7 The student who contributes positively to the learning community and to society is information literate and recognizes the importance of information to a democratic society				
7.1 Seeks information from diverse sources, contexts, disciplines, and cultures	1.2.B, 1.5.B, 1.6.F			4.1.10, 4.1.12, 4.2.10, 4.2.12, 4.3.10, 4.3.12, 4.4.10, 4.4.12, 4.5.10, 4.5.12, 4.6.10, 4.6.12, 4.7.10, 4.7.12, 4.8.10, 4.8.12 ,4.9.10 ,4.9.12
7.2 Respects the principle of equitable access to information	1.6.F, 1.8.B			

INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	Math	Science Technology *(Proposed)*	Ecology Environment *(Proposed)*
Standard 8 The student who contributes positively to the learning community and to society is information literate and practices ethical behavior in regard to information and information technology				
8.1 Respects the principles of intellectual freedom	1.6.D, 1.6.E, 1.6.F			
8.2 Respects intellectual property rights	1.4.C, 1.6.F, 1.8.C		3.5.B, 3.6.D	4.1.7, 4.1.10, 4.1.12, 4.2.7, 4.2.10, 4.2.12, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.7, 4.5.10, 4.5.12, 4.6.7, 4.6.10, 4.6.12, 4.7.7, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.7, 4.9.10, 4.9.12
8.3 Uses information technology responsibly	1.5.B, 1.6.F, 1.8.B		3.5.B, 3.6.A, 3.6.C, 3.6.D	4.1.7, 4.1.10, 4.1.12, 4.2.7, 4.2.10, 4.2.12, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.7, 4.5.10, 4.5.12, 4.6.7, 4.6.10, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.7, 4.9.10, 4.9.12

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INTEGRATION OF AASL/AECT INFORMATION LITERACY STANDARDS INTO THE PA ACADEMIC STANDARDS

Information Literacy Standards	Pennsylvania Academic Standards			
	Reading, Writing Speaking	Math	Science Technology *(Proposed)*	Ecology Environment *(Proposed)*
Standard 9 The student who contributes positively to the learning community and to society is information literate and participates effectively in groups to pursue and generate information				
9.1 Shares knowledge and information with others	1.6.A, 1.6.D, 1.6.E			4.1.7, 4.1.10, 4.1.12, 4.2.7, 4.2.10, 4.2.12, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.7, 4.5.10, 4.5.12, 4.6.7, 4.6.10, 4.6.12, 4.7.7, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.7, 4.9.10, 4.9.12
9.2 Respects others' ideas and backgrounds and acknowledges their contributions	1.6.A, 1.6.D, 1.6.E			
9.3 Collaborates with others, both in person and through technologies, to identify information problems and to seek their solutions	1.6.A, 1.6.D, 1.6.E			4.1.12, 4.2.12, 4.3.12, 4.4.12, 4.5.12, 4.6.12, 4.7.12, 4.8.12, 4.9.12
9.4 Collaborates with others, both in person and through technologies, to design, develop, and evaluate information products and solutions	1.6.E, 1.6.F			4.1.7, 4.1.10, 4.1.12, 4.2.7, 4.2.10, 4.2.12, 4.3.7, 4.3.10, 4.3.12, 4.4.4, 4.4.10, 4.4.12, 4.5.7, 4.5.10, 4.5.12, 4.6.7, 4.6.10, 4.6.12, 4.7.7, 4.7.10, 4.7.12, 4.8.10, 4.8.12, 4.9.7, 4.9.10, 4.9.12

BENCHMARKS

Based on the *Pennsylvania Academic Standards* and information literacy skills, the following performance indicators have been identified as benchmarks for grades three, five, eight and eleven. The performance indicators have been grouped by the information literacy standards as defined in *Information Power*.

PERFORMANCE INDICATORS BY THE END OF GRADE 3

Information Literacy

- Students will begin to develop problem-solving strategies for locating information using print and electronic resources.
- Students, with guidance, will organize, evaluate and present information.
- Students will cite sources used in a brief standardized format.

Independent Learning

- Students will locate and utilize all sections of the library.
- Students will choose and read various literary works that include fiction and non-fiction and represent various authors and illustrators.
- Students will participate in a wide variety of literature activities that involve various genre and types of media.
- Students will begin to use the library independently to develop life-long learning skills.
- Students will begin to utilize technology in developing expository or creative presentations (e.g., video, audio, presentation software, web page, etc.).

Social Responsibility

- Students will follow policies and procedures of the library.
- Students will be responsible for the care of materials and equipment.

PERFORMANCE INDICATORS BY THE END OF GRADE 5

Information Literacy

- Students will develop search strategies to locate information in print and electronic sources.
- Students will organize, evaluate and present information.
- Students will cite the sources used in a standardized format.

Independent Learning

- Students will choose and read various literary works that include fiction and non-fiction and represent various authors and illustrators.
- Students will interact with books and authors, expressing their opinions in written, oral, visual, and/or artistic form.
- Students will recognize the need to use all sections of the library independently and continue to develop life-long learning skills.
- Students will continue to utilize technology to develop expository or creative presentations (e.g., video, audio, presentation software, etc.).
- Students will use critical thinking skills to evaluate print and electronic resources.

Social Responsibilities

- Students will follow policies and procedures of the library.
- Students will be responsible for the care of materials and equipment.
- Students will be aware of the implications of copyright, plagiarism, and the importance of citing bibliographic sources.

PERFORMANCE INDICATORS BY THE END OF GRADE 8

Information Literacy

- Students will be able to define and refine their research question, as their information needs change.
- Students will develop search strategies to locate information in print and electronic sources.
- Students will use print and electronic indexes to locate books and periodicals for research.
- Students will access and integrate information from a variety of sources.
- Students will organize, analyze, evaluate, synthesize and present information in written, oral, visual, and/or artistic form.

Independent Learning

- Students will select and react to various genres and literary works.
- Students will recognize the need to use all sections of the library independently, and continue to develop life-long learning skills.
- Students will use critical thinking skills to evaluate print and electronic resources.
- Students will utilize technology to develop expository or creative presentations (e.g., video, audio presentations, software, website, etc.) using a variety of techniques and resources.

Social Responsibilities

- Students will follow policies and procedures of the library and be responsible for the care of materials and equipment.
- Students will cite bibliographic sources correctly, be in compliance with the copyright law, and will not plagiarize.

PERFORMANCE INDICATORS BY THE END OF GRADE 11

Information Literacy

- Students will be able to define and refine their questions, as their information needs change.
- Students will utilize search strategies and identify diverse sources to assist in completing research.
- Students will use appropriate techniques to collect, organize, interpret, and analyze information.
- Students will evaluate the information in terms of completeness, usefulness, accuracy, currency, bias, and authority.

Independent Learning

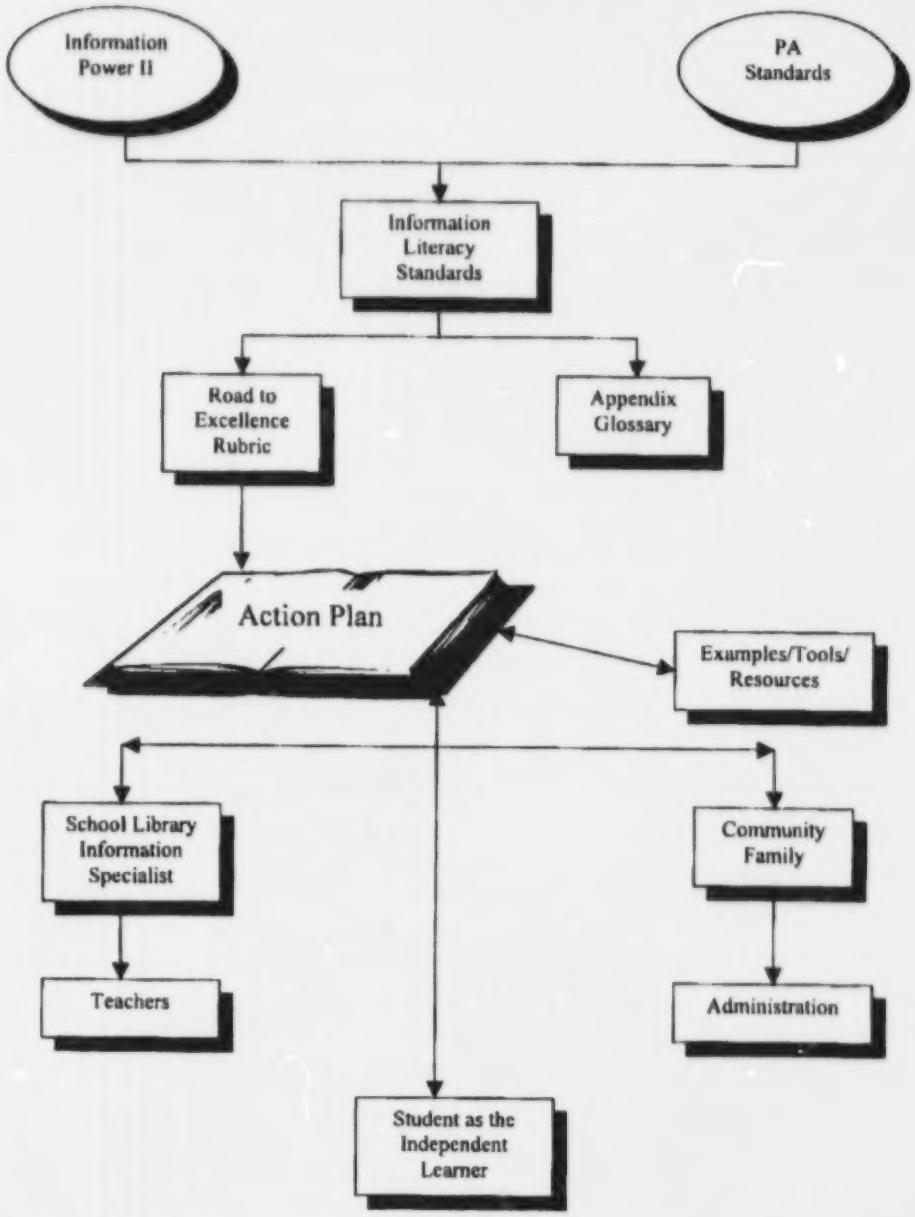
- Students will respond to non-fiction, fiction, poetry, and drama using interpretive, critical, and evaluative processes.
- Students will utilize technology to develop expository or creative presentations.

Social Responsibilities

- Students will follow policies and procedures of the library and be responsible for the care of materials and equipment.
- Students will acknowledge diverse ideas and incorporate them when appropriate into a finished product.
- Students will offer useful information to the group, defend that information when appropriate, and seek consensus to achieve a stronger product.
- Students will practice ethical usage of information and information technologies.
- Students will cite bibliographic sources correctly, be in compliance with the copyright law, and will not plagiarize.
- Students will recognize and understand the importance of intellectual freedom.

(North Allegheny School District's Library/Computer Curriculum, K-12)
(Central Columbia School District's Information Literacy Curriculum, K-12)

ACTION PLAN FOR IMPLEMENTING INFORMATION LITERACY STANDARDS



ROAD TO EXCELLENCE

Road to Excellence is a rubric designed to evaluate a library instructional program based on the student information literacy standards presented in *Information Power*. By using the rubric to identify proficiency levels, the school library information specialist can assess the existing integrated information skills and design action plans that will improve the overall instructional program and increase student achievement.

ROAD TO EXCELLENCE

A RUBRIC TO EVALUATE YOUR LIBRARY INSTRUCTIONAL PROGRAM

Does your library instructional program:

Standard	Criteria	Below Basic	Basic	Proficient	Advanced
1	Use a model that allows a student to access information efficiently and effectively	No model	Model used in cooperation	Model used in coordination	Fully integrated model used in collaboration
2	Include instruction in the use of evaluation tool	No evaluation tool	Print and web evaluation tool used in cooperation	Print and web evaluation tool used in coordination	Print and web tool fully integrated and used in collaboration
3	Address organization and communication skills	No model	Model used in cooperation	Model used in coordination	Fully integrated model used in collaboration
3	Address critical thinking/problem solving	No model	Model used in cooperation	Model used in coordination	Fully integrated model used in collaboration
3	Support presentation and creative expression	No model	Model used in cooperation	Model used in coordination	Fully integrated model used in collaboration
4	Include a plan that encourages students to pursue information related to their personal interest	No plan	Plan used in cooperation	Plan used in coordination	Fully integrated plan used in collaboration
5	Encourage students to appreciate literature and creative expressions of information	No program	Program used in cooperation	Program used in coordination	Fully integrated program used in collaboration
6	Include a plan that assists students to strive for excellence in information seeking and knowledge generation	No plan	Plan used in cooperation	Plan used in coordination	Fully integrated plan used in collaboration
7	Encourage students to seek and use diverse sources of information and to share information with their classmates	No program	Program used in cooperation	Program used in coordination	Fully integrated program used in collaboration
8	Encourage students to practice ethical behavior in regard to intellectual freedom, intellectual property, and information and information technology	No approved policies in place	Policies and procedures in development	Policies and procedures approved and implemented	Policies and procedures are fully integrated into the school community and endorsed by the learning community
9	Advocate student collaborative problem solving and use of information	No plan for advocacy	Plan in development	Plan implemented	Plan fully integrated into the school community

A7

ACTION PLAN
IMPLEMENTING INFORMATION LITERACY STANDARDS 1, 2, 3

Goal: **To integrate and implement the Information Literacy Standards 1, 2, 3 and PA Academic Standards into the information skills or library curriculum and other district curriculums.**

Objective: **To select and implement an Information Seeking Model.**

Procedure: **The school library information specialist, teachers, and administrators should complete this action plan.**

Step 1: Selection of Information Seeking Model

- Research the different Information Seeking Models (Below are some suggestions)
  - *Information Problem-Solving: the Big Six Skills Approach to Library and Information Skills Instruction* by Michael Eisenberg and Robert Berkowitz
  - *Pathways to Knowledge* by Marjorie Pappas and Ann Tepe
  - *Brainstorms and Blueprints: Teaching Library Research as a Thinking Process* by Barbara Stripling and Judy Pitts
  - *Teaching the Library Research Process* by Carol Kuhlthau
    See chart "Information Seeking Models."
- Correlate to the technology standards
  - *National Education Technology Standards* prepared by International Society for Technology Education
  - Pennsylvania Standards for Science and Technology
- Correlate to the supported models by curriculum organization
  - *A Different Kind of Classroom: Teaching with Dimensions of Learning* by Robert J. Marzano.
- Evaluate support resources for implementation
  - Publications
  - Newsletters
  - Discussion lists
  - Web sites
  - Lesson plans
- Consider cost for implementation
  - In-service (training and workshops for staff)
  - Materials

Step 2: Implementation of Selected Information Seeking Model

- Determine the level of implementation
  - District implementation
  - Building implementation
  - Grade level
- Provide professional development activities for the implementation committee in such areas as:
  - Model selected
  - Use of the Internet
    - Searching strategies
    - Web site evaluation tools
  - Technology tools that support the selected model
    - Word processor
    - Database
    - Spreadsheet
    - Digital images (camera, video cameras, scanners)
    - Multimedia presentation programs (*PowerPoint, Hyperstudio*, etc)
    - Organization software (*Inspiration*)
    - Other instructional software
  - Reading strategies included in the PSSA
  - Instructional design model
- Select a discipline or content area to implement model
- Collaborate with content teacher on planning the unit
- Create or review curriculum mapping
- Select a project/activity/unit to begin implementing
- Select technology tools which will assist in the implementation
- Select reading strategies that correlate to the selected model
- Select instructional design model that correlates to the selected model
- Design the project/activity/unit
  - Lessons
  - Evaluation Tool
- Develop an assessment for the use of the model

Step 3: Instruct the students using the selected model

Step 4: Evaluate the effectiveness of the selected model

- Create an assessment tool for the model based on student's work
- Create an assessment tool for the school library media specialist
- Create an assessment tool for the content teacher

Step 5: Expand the implementation of the selected model

- PTA and other parent meetings
- Public Library
- Create a summary on the library's home page

INFORMATION SEEKING MODELS

Big Six	Pathways to Knowledge	Research Process	Information Seeking
Eisenberg & Berkowitz	**Pappas & Tepe**	**Stripling & Pitts**	**Kuhlthau**
Task Definition ♦ Define the task (information problem ♦ Identify the information need to complete the task	Appreciation	Choose a broad topic Get an overview of the topic Narrow the topic	Initiation
Information-Seeking Strategies ♦ Brainstorm all possible sources ♦ Select the best source	Presearch ♦ Develop overview ♦ Explore relationships	Develop thesis/purpose statement Formulate questions to guide research	Selection Exploration (investigate information on the general topic)
Location and Access ♦ Locate sources (intellectually and physically) ♦ Find information within the source	Search ♦ Identify information providers ♦ Select information resources & tools ♦ Seek relevant information	Plan for research and production Find, analyze and evaluate sources	Formulation of focus
Use of Information ♦ Engage (read, hear, view touch) the information source ♦ Extract relevant information	Interpretation ♦ Interpret information	Evaluate evidence, take notes, and compile bibliography.	Collection (gather information on the focused topic)
Synthesis ♦ Organize information from multiple sources ♦ Present the information	Communication ♦ Apply information ♦ Share new knowledge	Establish conclusions/organize information in outline Create and present final product	Presentation
Evaluation ♦ Judge the process (efficiency) ♦ Judge the product (effectiveness)	Evaluation ♦ Evaluate process and product		Assessment (of outcome/process)

050

ACTION PLAN
IMPLEMENTING INFORMATION LITERACY STANDARDS 4, 5, 6

Goal: **To integrate and implement the Information Literacy Standards 4, 5, 6 and PA Academic Standards into the information skills or library curriculum and other district curriculums.**

Objective: **To create independent learners.**

Procedure: **The school library information specialist, teachers, and administrators should complete this action plan.**

Step 1: Select resources on appropriate reading levels

- ❑ Review PSSA test scores for the school
- ❑ Discuss issues with reading coordinator or language arts teacher

Step 2: Correlate resources to the curriculum in a variety of formats

- ❑ Books
- ❑ Magazines
- ❑ Newspapers
- ❑ Audio tapes
- ❑ Video tapes
- ❑ Laser discs
- ❑ Charts
- ❑ Pamphlets
- ❑ Reference materials (print and online)
- ❑ Websites

Step 3: Determine the procedure to obtain input into acquisition of resources

- ❑ Teachers
- ❑ Administrators
- ❑ Students
- ❑ Parents/Community
- ❑ Public Library

Step 4: Subscribe to and read a variety of professional journals for latest technical and evaluation tools

- ❑ *School Library Journal*
- ❑ *Computers in Libraries*
- ❑ *Book Report*
- ❑ *Teacher/Librarian*
- ❑ *VOYA*
- ❑ *Booklist*
- ❑ *Web Feet*

Step 5: Determine the degree of computer availability within the library information center for student use

- LAN (Local Area Network)
- WAN (Wide Area Network)
- Internet access
- Online resources networked
- DVD/CD-ROM

Step 6: Develop a collection that reflects a wide variety of interests and curricular support

- Curriculum support
- Cultural diversity
- Student personal interests
- Appropriate reading levels and languages

Step 7: Determine degree of availability of the school library information specialist and facility for student use

- Staff aide/ secretary
- Extended hours or after school hours
- Evening hours
- Open all day
- Environment conducive to reading
- Environment conducive to small group work

Step 8: Pursue funding for purchasing resources that promotes independent learning

- District
- Grants (Link2Learn, ESEA, etc.)
- PTA and community support organizations
- Local businesses (newspapers, cable, phone, etc.)

ACTION PLAN
IMPLEMENTING INFORMATION LITERACY STANDARDS 7, 8, 9

Goal: **To integrate and implement the Information Literacy Standards 7, 8, 9 and PA Academic Standards into the information skills or library curriculum and other district curriculums.**

Objective: **To create a plan to develop social responsibility.**

Procedure: **The school library information specialist, teachers, and administrators should complete this action plan.**

Step 1: Invite the participation of key members of the learning community in developing the plan

Step 2: Develop an advocacy plan to help students develop

- Responsible library citizenship
- Scholarship based on ethical behavior
- Collaborative learning

Step 3: Develop objectives that advocate social responsibility for

- Librarians
- Teachers
- Students

Step 4: Develop and present an in-service program for all teachers and administrators providing

- Strategies for developing socially responsible behavior in themselves
- Strategies for teaching and modeling socially responsible behavior to their students
- Strategies for requiring socially responsible from their students

Step 5: Develop policies and procedures for promoting socially responsible behavior

- Produce booklets on how to cite sources for public use
- Produce a copyright booklet for public use

Step 6: Develop strategies for modeling and advocacy based on target audiences at each level of instruction

Step 7: Implement the plan with one specific targeted audience as a pilot

Step 8: Evaluate the pilot plan and make any needed modifications

Step 9: Implement the plan to all target audiences

Step 10: Evaluate the success of the plan based on how well targeted audiences have met the stated objectives

CURRICULUM

The following charts provide a suggested library curriculum for "benchmark" grade levels, 3, 5, and 8.

This sample curriculum was prepared by the:

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Grade 3 Library Curriculum

Student who is a quality producer and self-directed learner will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.3.3 A Read and understand works of literature	**Recognize Quality and Craftsmanship** **Literature** • Appreciation ▪ Define the term Caldecott Award ▪ Read literature by award winning authors ▪ Read and examine literature illustrated by award winning illustrators ▪ Identify authors of interest ▪ Identify illustrators of interest	Model book talks/literature circles ❑ Recommended reading list	Observe circulation Student presentation Reading log/journal	
1.3.3 A Read and understand works of literature **1.3.3 F** Read and respond to nonfiction and fiction, including poetry and drama	• Genres ▪ Identify the characteristics of genres: - Animal stories - Fantasy - Historical fiction - Mystery - Realistic fiction - Traditional literature - Poetry - Biography	Develop characteristics Introduce characteristics Introduce characteristics Develop characteristics Develop characteristics Develop characteristics Develop characteristics Introduce characteristics ❑ Information packet	Student presentation Reading log/journal	
1.3.3 A Read and understand works of literature **1.3.3 F** Read and respond to nonfiction and fiction, including poetry and drama	**Establish Clear Information Goals** • Book selection ▪ Select books of interest ▪ Select books on appropriate level ▪ Set information goals and finds a variety of resources to achieve these goals	Facilitate book selection ❑ Independent reading Introduce strategy	Reading log Observe circulation	

Grade 3 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.3 A Select a topic for research	**Determine Information Need** **Topic** • Reference need ▪ Articulate the reference need	Introduce strategy	Statement of topic	
1.8.3 B Locate information using appropriate sources and strategies	**Develop Information Seeking Strategies** **Information Providers** • School library information center ▪ Select appropriate print resources - Recognize call number components - Locate print material utilizing call numbers - Explains the organization of the Dewey Decimal System ▪ Identify appropriate electronic resources ▪ Identify appropriate online resources ▪ Identify appropriate audiovisual resources	Review call numbers Introduce Dewey Decimal System Introduce resources Introduce resources Introduce resources	Checklist of resources	
	• Global and educational providers ▪ Utilize public library		Checklist of resources	
1.8.3 B Locate information using appropriate sources and strategies	**Search Strategies** • Browse ▪ Utilize correct format for personal name ▪ Utilize table of contents ▪ Utilize index ▪ Locate title page ▪ Locate call number	Introduce strategy Develop strategy Develop strategy Review strategy Review strategy	Search strategy sheet	

Grade 3 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
		❑ Textbooks ❑ Nonfiction books ❑ Fiction books		
	• Hypertext • Utilize links	Introduce strategy ❑ CD-ROM ❑ Internet	Search strategy sheet	

	• Analytical
	  • Utilize Boolean Operators
	  - And
		Introduce strategy
		❑ Electronic catalog
			Search strategy sheet	

	Locates and Acquires Information			

1.8.3 B
Locate information using appropriate sources and strategies
	Electronic catalog
	• Searches
	  • Perform an author search
	  • Perform a title search
	  • Perform a subject search
		Develop operations
		❑ Electronic catalog
			Checklist of resources	

1.8.3 B Locate information using appropriate sources and strategies	**CD-ROM** • Searches • Perform a subject search	Develop strategies ❑ First Connections	Checklist of resources	
	• Graphics • Utilize the graphics to obtain information		Observation	

1.2.3A
Read and understand essential content of informational texts and documents in all academic areas
	• Downloading
	  • Save appropriate information
	  • Print appropriate information
			Review printouts	

Grade 3 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.3 B Locate information using appropriate sources and strategies **1.8.3 B** Locate information using appropriate sources and strategies **1.2.3 A** Read and understand essential content of informational texts and documents in all academic areas	**On-line Searching** • Searches ▪ Perform a directed search ▪ Perform a search utilizing bookmarks • Electronic mail ▪ Discuss purpose **Reference Sources** • Periodical database ▪ Complete a subject search ▪ Download appropriate information • *SIRS Discoverer* ▪ Complete a search ▪ Download appropriate information • Online encyclopedias ▪ Complete a search ▪ Download appropriate information • *Associated Press Photo Archives* ▪ Be aware of the purpose • Biographical tools ▪ Collect information on a person • Thesaurus ▪ Recognize the purpose of the resource • Atlas ▪ Collect information on a geographical location • Dictionary ▪ Utilize to acquire information	Develop strategy ▫ Current browser Review purpose and procedure Introduce purpose ▫ *ICONnect* online courses Introduce operation and purpose ▫ *Primary Search* Develop operation and purpose ▫ *SIRS* workbook Develop search strategies ▫ *World Book Online* Introduce resource Introduce purpose and operation ▫ Electronic formats Introduce purpose and operation ▫ Print format ▫ Electronic format Introduce purpose and operation ▫ Print format Electronic format Develop operation ▫ Print format ▫ Electronic format	Observation Observation Printout of information Printout of information Printout of information Observation Observation Observation Printout of information Observation	

828

Grade 3 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.3 C Organize, summarize and present main ideas from research **1.8.3 C** Organize, summarize and present main ideas from research	**Evaluates Information** **Procedure** • Criteria ▪ Be aware of the criteria **Bibliography** • Citation ▪ Write the title and author of resource	Introduce strategies ▫ *ICONnect* online courses ▫ Web site evaluation tools Introduce purpose - Print - Nonprint - Electronic - Online	Observation Bibliographic worksheet	

Grade 3 Library Curriculum

Student who is a group contributor and responsible information user will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.3 C Organize, summarize and present the main ideas from (the) research.	**Demonstrate social responsibility:** **Equitable access** • Circulation procedures ▪ Follow circulation procedures and guidelines	Review procedures	Circulation system	
	Ethical behavior • Intellectual freedom ▪ Be aware of the term "intellectual freedom"	Introduce terminology	Discussion	
	• Intellectual property rights ▪ List sources in presentations ▪ Introduce the term "plagiarism"	Discuss plagiarism	Pathfinder of resources	
	• Cybersafety ▪ Cite the rules of cybersafety	Review rules	Observation	
	• Acceptable use ▪ Demonstrate acceptable use of resources ▪ Demonstrate responsible use of equipment ▪ Demonstrate responsible care of facility	Review policy and procedures ▫ Student Handbook	Observation	
	Member of Learning Group • Criteria ▪ Share knowledge gained from resources ▪ Respect others ideas and opinions ▪ Work to solve an information problem	Review guidelines of workin g in groups	Observation	

Grade 5 Library Curriculum

Student who is a quality producer and self-directed learner will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.3.8 A Read and understand works of literature	**Recognize Quality and Craftsmanship** **Literature** • Appreciation ▪ Explain the significance of Newbery Award ▪ Read literature by award winning authors ▪ Read and examine literature illustrated by award winning illustrators ▪ Examine the different illustrator's techniques	Model book talks/literature circles ▫ Recommended reading list	Observe circulation Student presentation Reading log/journal	
1.3.8 A Read and understand works of literature **1.3.8 F** Read and respond to nonfiction and fiction, including poetry and drama	• Genres ▪ Define characteristics of genres: - Adventure - Animal stories - Fantasy - Historical fiction - Mystery - Realistic fiction - Traditional literature - Poetry - Biography	Introduce characteristics Review characteristics Develop characteristics Develop characteristics Review characteristics Review characteristics Develop characteristics Review characteristics Develop characteristics ▫ Information packet ▫ Recommended reading list	Student presentation Reading log/journal	

613

Grade 5 Library Curriculum

Student who is a quality producer and self-directed learner will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time

1.3.8 A
Read and understand works of literature
 	
1.3.8 F
Read and respond to nonfiction and fiction, including poetry and drama
	Establish Clear Information Goals
	• Book selection
	  • Select books of interest
	  • Select books on appropriate level
	  • Select books according to genre
	  • Set information goals and find a variety of resources to achieve these goals
		Facilitate book selection
		▫ Independent reading
			Reading log
			Observe circulation	

Grade 5 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.5 A Select and refine a topic for research	**Determine Information Need** **Topic** • Reference need ▪ State the reference need ▪ Select topic(s) ▪ Refine topic(s)	Develop strategy	Statement of topic	
1.8.5 B Locate information using appropriate sources and strategies	**Develop Information Seeking Strategies** **Information Providers** • School library information center ▪ Choose appropriate print resources ▪ Choose appropriate electronic resources ▪ Choose appropriate online resources ▪ Choose appropriate audiovisual resources	Review strategy	Checklist of resources	
	• Global and educational providers ▪ Identify appropriate new services ▪ Identify appropriate local, state and federal agencies ▪ Utilize various libraries ▪ Choose appropriate educational programs ▪ Choose home resources	Introduce strategy	Checklist of resources	
1.8.5 B Locate information using appropriate sources and strategies	**Search Strategies** • Browse ▪ Utilize keyword ▪ Utilize case sensitive rules	Review strategy ▫ Electronic catalog ▫ Textbooks	Search strategy sheet	

Grade 5 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
	• Utilize correct format for personal name • Utilize table of contents • Utilize index • Utilize appendices	❑ Nonfiction books		

	• Hypertext
	  • Utilize links
	  • Perform cross reference searches
		Review strategy
		❑ CD-ROM
		❑ Internet
			Search strategy sheet	

	• Hierarchical
	  • Broaden a search
	  • Narrow a search
		Develop strategy
		❑ Online encyclopedias
			Search strategy sheet	

1.8.5 B
Locate information using appropriate sources and strategies
	• Analytical
	  • Utilize Boolean Operators
	  - And
	  - Or
	  - Not
		Develop strategy
		❑ Electronic catalog
		❑ Online encyclopedias
			Search strategy sheet	

	Sources • Primary vs secondary • Be aware of the terms	Introduce the concept ❑ Internet	Checklist of resources	

1.8.5 B
Locate information using appropriate sources and strategies
	Locates and Acquires Information
	Electronic Catalog
	• Searches
	  • Perform a keyword search
	  • Perform an author search
	  • Perform a title search
	  • Perform a series search
	  • Perform a subject search
		Review operations
		❑ Electronic catalog
			Checklist of resources	

Grade 5 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.5 B Locate information using appropriate sources and strategies	**CD-ROM** • Searches ▪ Perform a subject search ▪ Perform a keyword search • Graphics ▪ Utilize the graphics to obtain information	Review strategies ▫ *Atlas of the Presidents*	Observation	
1.2.5 A Read and understand essential content of informational texts and documents in all academic areas	• Downloading ▪ Save appropriate information ▪ Print appropriate information		Review printouts	
1.8.5 B Locate information using appropriate sources and strategies	**On-line Searching** • Searches ▪ Perform a directed search	Review strategy ▫ Current browser	Observation	
	▪ Perform a search utilizing bookmarks	Review purpose and procedure Discuss arrangement to add: - At home - At school ▫ Current browser	Observation	
	▪ Identify a search engine	Introduce different search engines ▫ *ICONnect* online courses	Comparison chart	
	▪ Identify a directory	Introduce different search engines ▫ *ICONnect* online courses	Comparison chart	

Grade 5 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.5 B Locate information using appropriate sources and strategies	• Identify a metacrawler			
	• Terminology • Define, state purpose, and provide examples of: • web browser • service provider • home page • cyberspace • domain names - Commercial - Government - Military - Organization - Network - Education • hypertext	Review terminology ❑ *ICONnect* online courses	Comparison chart Presentation	
	• Electronic mail • Explain how to use as an interviewing tool	Develop etiquette ❑ *ICONnect* online courses	Printout of interview	
1.8.5 B Locate information using appropriate sources and strategies	**Reference Sources** • Periodical database • Complete a keyword search • Download appropriate information • *SIRS Discoverer* • Complete a search • Download appropriate information	Develop operation and purpose ❑ *Primary Search* Develop operation and purpose ❑ *SIRS* workbook	Pathfinder of resources utilized Pathfinder of resources utilized	

Grade 5 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time

1.2.5 A
Read and understand essential content of informational texts and documents in all academic areas
	• Online encyclopedias
	  ▪ Complete a search
	  ▪ Download appropriate information
	• Newspaper source
	  ▪ Identify the purpose
	  ▪ Locate an assigned article
	• *Searchasaurus* database
	  ▪ Explain the purpose of the resource
	  ▪ Explore operation of how to utilize
	• *Associated Press Photo Archives*
	  ▪ Download a photo for a presentation
	• Biographical tools
	  ▪ Collect information on a person
	• Almanac
	  ▪ Collect information utilizing an almanac
	• Thesaurus
	  ▪ Utilize to improve word choice
	• Atlas
	  ▪ Collect information on a geographical location
	• Dictionary
	  ▪ Utilize to acquire information
		Develop search strategies
		  ❑ *Grolier Multimedia Online*
		  ❑ *World Book Online*
		Introduce search strategies
		Introduce purpose
		Review downloading procedures
		Review purpose and operation
		  ❑ *Junior Book of Authors* series
		  ❑ Electronic formats
		Develop purpose and operation
		  ❑ *World Almanac*
		  ❑ Electronic almanac
		Review purpose and operation
		  ❑ Print format
		  ❑ Electronic format
		Review purpose and operation
		  ❑ Print format
		  ❑ Electronic format
		Review purpose and operation
		  ❑ Print format
		  ❑ Electronic format
			Pathfinder of resources utilized
			Observation
			Observation
			Presentation
			Pathfinder of resources utilized
			Pathfinder of resources utilized
			Pathfinder of resources utilized
			Pathfinder of resources utilized
			Pathfinder of resources utilized	

Grade 5 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
	Evaluates Information			
1.8.5C Organize, summarize and present main ideas from research	**Procedure** • Criteria ▪ Determine authority ▪ Determine accuracy ▪ Determine timeliness ▪ Determine content relative to need	Introduce strategies ▫ *ICONnect* online courses ▫ Web site evaluation tools	Pathfinder of resources utilized	
	• Comparison ▪ Compare information from 3-5 resources	Introduce strategies	Rank pathfinder resources	
1.8.5C Organize, summarize and present main ideas from research	**Bibliography** • MLA Style ▪ Utilize MLA style to prepare a bibliography	Introduce MLA bibliographic style for: - Print - Nonprint - Electronic - Online ▫ MLA Style Manual or Sheet	Bibliography in MLA style	

Grade 5 Library Curriculum

Student who is a group contributor and responsible information user will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.5 C Organize, summarize and present the main ideas from (the) research	**Demonstrate social responsibility:** **Equitable access** • Circulation procedures ▪ Follow circulation procedures and guidelines • Resources ▪ Be aware of the need to obtain information from a diversity of perspectives **Ethical behavior** • Intellectual freedom ▪ Be aware of the term "intellectual freedom" • Intellectual property rights ▪ Cite sources in presentations ▪ Recognize the importance of not plagiarizing • Cybersafety ▪ Practice cybersafety • Acceptable use ▪ Demonstrate acceptable use of resources ▪ Demonstrate responsible use of equipment ▪ Demonstrate responsible care of facility	Review procedures Introduce strategy Discuss terminology Discuss banned books Discuss plagiarism ▫ Newspaper articles ▫ Bill of Rights ▫ Banned book materials Discuss chat rooms Discuss implications ▫ Newspaper articles ▫ Current court cases Review policy and procedures ▫ Student Handbook	Circulation system Pathfinder of resources Articles on intellectual freedom Articles on plagiarism Observation Observation	

Grade 5 Library Curriculum

Student who is a group contributor and responsible information user will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
	Member of Learning Group • Criteria ▪ Share knowledge gained from resources ▪ Respect others ideas and opinions ▪ Work to solve an information problem	Review guidelines of working in groups	Observation	

Grade 8 Library Curriculum

Student who is a quality producer and self-directed learner will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.3.8 A Read and understand works of literature	**Recognize Quality and Craftsmanship** **Literature** • Appreciation ▪ Explain the significance of Newbery Award ▪ Read literature by award winning authors ▪ Read and examine literature illustrated by award winning illustrators ▪ Examine the different illustrator's techniques	Model book talks/literature circles ❑ Recommended reading list	Observe circulation Student presentation Reading log/journal	
1.3.8 A Read and understand works of literature **1.3.8 F** Read and respond to nonfiction and fiction, including poetry and drama	• Genres ▪ Apply their knowledge of the characteristics of the following genres: - Adventure - Animal stories - Fantasy/Science fiction - Historical fiction - Mystery - Realistic fiction - Traditional literature	Review characteristics ❑ Information packet ❑ Recommended reading list	Student presentation Reading log/journal	
1.3.8 A Read and understand works of literature **1.3.8 F** Read and respond to nonfiction and fiction, including poetry and drama	**Establish Clear Information Goals** • Book selection ▪ Select books of interest ▪ Select books on appropriate level ▪ Select books according to genre ▪ Select information goals and find a variety of resources to achieve these goals	Facilitate book selection ❑ *Accelerated Reader* ❑ Independent reading	Reading log *Accelerated Reader* tests Observe circulation	

Grade 8 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.8 A Select and refine a topic for research	**Determine Information Need** **Topic** • Reference Need ▪ State the reference need ▪ Select topic(s) ▪ Refine topic(s)	Review strategy	Statement of topic	
1.8.8 B Locate information using appropriate sources and strategies	**Develop Information Seeking Strategies** **Information Providers** • School library information center ▪ Choose appropriate print resources ▪ Choose appropriate electronic resources ▪ Choose appropriate online resources ▪ Choose appropriate audiovisual resources	Review strategy	Checklist of resources	
	• Global and educational providers ▪ Select appropriate new services ▪ Select appropriate local, state and federal agencies ▪ Utilize various libraries ▪ Choose appropriate educational programs ▪ Choose home resources	Review strategy	Checklist of resources	
1.8.8 B Locate information using appropriate sources and strategies	**Search Strategies** • Browse ▪ Utilize keyword ▪ Utilize case sensitive rules	Review strategy ▫ Electronic catalog ▫ Textbooks ▫ Nonfiction books	Search strategy sheet	

Grade 8 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.8 A Select and refine a topic for research	**Determine Information Need** **Topic** • Reference Need ▪ State the reference need ▪ Select topic(s) ▪ Refine topic(s)	Review strategy	Statement of topic	
1.8.8 B Locate information using appropriate sources and strategies	**Develop Information Seeking Strategies** **Information Providers** • School library information center ▪ Choose appropriate print resources ▪ Choose appropriate electronic resources ▪ Choose appropriate online resources ▪ Choose appropriate audiovisual resources	Review strategy	Checklist of resources	
	• Global and educational providers ▪ Select appropriate new services ▪ Select appropriate local, state and federal agencies ▪ Utilize various libraries ▪ Choose appropriate educational programs ▪ Choose home resources	Review strategy	Checklist of resources	
1.8.8 B Locate information using appropriate sources and strategies	**Search Strategies** • Browse ▪ Utilize keyword ▪ Utilize case sensitive rules	Review strategy ❑ Electronic catalog ❑ Textbooks ❑ Nonfiction books	Search strategy sheet	

173

Grade 8 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
	▪ Utilize correct format for personal name ▪ Utilize table of contents ▪ Utilize index ▪ Utilize appendices			
	• Hypertext ▪ Utilize links ▪ Perform cross reference searches	Review strategy ▫ CD-ROM ▫ Internet	Search strategy sheet	
	• Hierarchical ▪ Broaden a search ▪ Narrow a search	Develop strategy ▫ *Grolier Multimedia Online*	Search strategy sheet	
	• Analytical ▪ Utilize Boolean Operators - And - Or - Not - Truncation	Develop strategy ▫ Electronic Catalog ▫ *SIRS Discoverer* ▫ *Readers' Guide to Periodical Literature* ▫ Periodical index	Search strategy sheet	
1.8.8 B Locate information using appropriate sources and strategies	**Sources** • Primary vs secondary ▪ Select examples primary and secondary source	Discuss appropriate forms of word to utilize in the search Develop the concept ▫ Internet	Checklist of resources	
1.8.8 B Locate information using appropriate sources and strategies	**Locates and Acquires Information** **Electronic catalog** • Searches ▪ Perform a keyword search	Review operations ▫ Electronic catalog		

Grade 8 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.8 B Locate information using appropriate sources and strategies	▪ Perform an author search ▪ Perform a title search ▪ Perform a subject search ▪ Perform a series search		Checklist of resources	
1.2.8 A Read and understand essential content of informational texts and documents in all academic areas	**CD-ROM** • Searches ▪ Perform a subject search ▪ Perform a keyword search • Graphics ▪ Utilize the graphics to obtain information • Downloading ▪ Save appropriate information ▪ Print appropriate information	Review strategies ▫ *Current Biography*	Observation Review printouts	
1.8.8 B Locate information using appropriate sources and strategies	**On-line Searching** • Searches ▪ Perform a directed search ▪ Perform a search utilizing bookmarks ▪ Perform a search utilizing a search engine	Review strategy ▫ Current browser Review purpose and procedure Discuss arrangement to add: - At home - At school ▫ Current browser Compare different search engines ▫ *ICONnect* online courses	Observation Observation Comparison chart	

Grade 8 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.8.8 B Locate information using appropriate sources and strategies	• Perform a search utilizing a directory	Compare different directories ❑ *ICONnect* online courses	Comparison chart	
	• Perform a search utilizing a metacrawler	Compare different metacrawlers ❑ *ICONnect* online courses	Comparison chart	
	• Terminology • Define, state purpose, and provide examples of: • web browser • service provider • home page • cyberspace • domain names - Commercial - Government - Military - Organization - Network - Education • hypertext	Review terminology ❑ *ICONnect* online courses	Presentation	
	• Electronic mail • Utilize as a tool for interviewing • Utilize as a primary source	Review etiquette ❑ *ICONnect* online courses	Printout of interview	
1.8.8 B Locate information using appropriate sources and strategies	**Reference Sources** • Periodical database • Complete a keyword search	Develop operation and purpose ❑ *Middle Search*	Pathfinder of resources utilized	

Grade 8 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
1.2.8 A Read and understand essential content of informational texts and documents in all academic areas	• Download appropriate information • *SIRS Discoverer* ▪ Complete a search ▪ Download appropriate information • Online encyclopedias ▪ Complete a search ▪ Download appropriate information • Newspaper source ▪ Complete a search ▪ Download appropriate information • *ERIC* database ▪ Explain the purpose of the resource ▪ Explore operation of how to utilize • *Associated Press Photo Archives* ▪ Download a photo for a presentation • Biographical tools ▪ Collect information on a person • Almanac ▪ Utilize an almanac • Thesaurus ▪ Utilize to improve word choice • Atlas ▪ Collect information on a geographical location	Develop search strategies □ *SIRS* workbook Develop search strategies □ *Grolier Multimedia Online* □ *World Book Online* Develop search strategies Review purpose Review downloading procedures Review purpose and operation □ *Junior Book of Authors* series □ Electronic format Review purpose and operation □ *World Almanac* □ Electronic almanac Review purpose and operation □ Print format □ Electronic format Review purpose and operation □ Print format □ Electronic format	Pathfinder of resources utilized Pathfinder of resources utilized Observation Observation Presentation Pathfinder of resources utilized Pathfinder of resources utilized Pathfinder of resources utilized	

Grade 8 Library Curriculum

Student who is a knowledge seeker and information literate will:

Pennsylvania Standards	Topics/Performance Objectives	Activities/Resources	Assessment Strategy	Time
	• Dictionary ▪ Utilize to acquire information	Review purpose and operation ▫ Print format ▫ Electronic format	Pathfinder of resources utilized	
	Evaluates Information			
1.8.8C Organize, summarize and present main ideas from research	**Procedure** • Criteria ▪ Determine authority ▪ Determine accuracy ▪ Determine timeliness ▪ Determine content relative to need	Develop strategies		
	• Comparison ▪ Compare information from 5-8 resources	Develop strategies	Rank pathfinder resources	
1.8.8C Organize, summarize and present main ideas from research	**Bibliography** • MLA style ▪ Utilize MLA style to prepare a bibliography	Review MLA bibliographic style for: - Print - Nonprint - Electronic - Online ▫ MLA Style Manual or Sheet	Bibliography in MLA style	
	• In-text citation ▪ Demonstrate an awareness of citation	Introduce the concept	Discussion	

STUDENT INFORMATION LITERACY RUBRIC: AN OVERVIEW AND FRAMEWORK BASED ON THE INFORMATION LITERACY CURRICULUM FOR CENTRAL COLUMBIA SCHOOL DISTRICT

Target Indicators	*In Progress*	*Essential*	*Proficient*	*Advanced*
Student as a Knowledge Seeker	I need someone to tell me when I need information, what information I need, and help me find it.	Sometimes I can identify my information needs. I ask for help finding and using information.	I am able to determine when I have a need for information. I often solve problems by using a variety of information resources.	I know my information needs. I am confident that I can solve problems by selecting and processing information.
Student as a Quality Producer	Someone else sets the standards and I try to create a product to meet them.	I may need help understanding what makes a good product and support to create one.	I compare my work to models and use them as examples for my product.	I hold high standards for my work and create quality products.
Student as a Self-Directed Learner	I have trouble choosing my own resources, and I like someone to tell me the answer.	I might know what I want but need to ask for help in solving information problems.	I choose my own resources and like being independent in my information searches.	I like to choose my own information resources. I am comfortable in situations where there are multiple answers as well as those with no answers.
Student as a Group Contributor	I need support to work in a group. I have trouble taking responsibility to help the group.	I usually participate with the group. I offer opinions and ideas but cannot always defend them. I rely on others to make group decisions.	I participate effectively as a group member. I help the group process and evaluate and use information with the group.	I am comfortable leading, facilitating, negotiating, or participating in a group. I work with others to create a product that fairly represents consensus of the group.
Student as a Responsible Information User	If I find information I can use, I copy it directly. I need to be reminded about being polite and about sharing resources and equipment with others.	I usually remember to give credit when I use someone else's ideas. It is okay for others to have different ideas from mine. I try to be polite and share information resources and equipment with others.	I do not plagiarize. I understand the concept of intellectual freedom. I am polite and share resources and equipment with others.	I follow copyright laws and help others understand the concept of intellectual freedom. I can defend my rights if challenged. I acknowledge and respect the rights of others to use information resources and equipment.

INFORMATION LITERACY
GUIDELINE #1: STUDENT AS A KNOWLEDGE SEEKER

Target Indicators	*In Progress*	*Essential*	*Proficient*	*Advanced*
Determines Information Needs	I need someone to tell me the topic. And what information I need.	I need someone to define the topic. I can identify, with help, some of the information I need.	I determine a topic and identify the information I need.	I determine a manageable topic and identify the kinds of information I need to support the topic.
Develops Information-Seeking Strategies and Locates Information	Someone else selects the information resources I need and shows me how to find the information. Someone else develops my plan and timeline. I do not know what to record when doing research or developing a bibliography.	I select resources but they are not always appropriate. I have an incomplete plan. I have a timeline but don't always stick to it. I return to the same source to find the bibliographic details.	I use a variety of information strategies and resources. I have a complete plan and stay on my timeline. I sometimes record bibliographic information.	I always select appropriate strategies and resources. I have a complete plan and can adjust my timeline when needed. I always record bibliographic information for all my sources.
Acquires Information	I don't understand how to use information resources. Someone helps me extract details from information.	I do not use a variety of information resources. I can extract details and concepts from one type of information resource.	I prefer to limit the number of information resources I use. I extract details and concepts from different types of resources.	I am comfortable using various information resources. I extract details and concepts from all types of resources.
Analyzes Information Relative to Need	I have no way to determine what information to keep and what to discard. Someone helps me decide what information to use.	I sometimes apply appropriate criteria to decide which information to use. I don't always know what criteria to use.	I examine my information and apply criteria to decide what to use. I usually know what criteria to use.	I effectively apply criteria to decide what information to use. I can match criteria with need.

INFORMATION LITERACY
GUIDELINE #1: STUDENT AS A KNOWLEDGE SEEKER

Target Indicators	*In Progress*	*Essential*	*Proficient*	*Advanced*
Organizes Information	I try to organize information but have trouble and have to ask for help. I need to be reminded to credit sources.	I know some ways to organize information. I can use one or two very well. Sometimes I credit sources appropriately.	I organize information in different ways. I usually credit sources appropriately.	I choose to organize information in a way that matches my learning style and/or to best meet my information needs. I always credit sources appropriately.
Processes Information	I put information together without processing it.	I combine information to create meaning. I draw conclusions.	I integrate information from a variety of sources to create meaning that connects with prior knowledge. I can draw conclusions on my own from my sources.	I integrate information to create meaning that connects with prior knowledge and draw clear and appropriate conclusions. I provide specific and supportive details.
Acts on Information	I am not sure what actions to take based on my information needs. I ask for help to find everything I need.	I know what to do with the information I find. Some of the information I find is appropriate to my needs.	I act based on the information I have collected and processed. I do this in a way that is appropriate to my needs.	I act independently of the information I have collected and processed. I do this in a way that is appropriate to my needs. I can explain my actions so that others understand.
Evaluates Process And Product	I don't know how I did. I need someone to help me figure out how to improve.	I know how well I did and have a few ideas on how to improve next time.	I know when I've done a good job and know when there are things I could have done better. I make some revisions.	I evaluate the product and the process throughout my work and make revisions when necessary.

INDEPENDENT LEARNING
GUIDELINE #2: STUDENT AS A QUALITY PRODUCER

Target Indicators	*In Progress*	*Essential*	*Proficient*	*Advanced*
Recognizes Quality and Craftsmanship	I need help understanding what makes a good product and how to create it.	I look at the available products and sometimes see what is needed to create my own.	I look at several products, evaluate them, and know what I need to do.	I look at several products provided to me by my instructor, critique them, and see ways to make a better product.
Plans a Quality Product	I need help to understand the steps needed to plan my work. I like someone to help me with each step in completing the product.	I need to be shown the steps necessary for completing my plan and then can work on my own.	I know the steps necessary for completing my product and make a plan to complete it.	I create a process and a timeline (with a back-up plan) for all the steps needed to complete my product.
Creates a Quality Product	I need help to find which sources to use. I don't know how to use the facts to solve the problem. I have trouble creating the product.	I use the minimum sources assigned. I just list the facts. I always use the same sources for other work.	I create and improve my product by using a variety of resources from the library or school.	I compare and contrast facts from a variety of sources available both in and out of my school. I am comfortable using various media for products and audiences. I discover new sources on my own.
Presents a Quality Product	My product is incomplete. I don't revise the product.	I complete, but need help with, revision to my product.	I complete, practice, and revise my product.	I complete, practice, and revise my product several times. I ask others to give me feedback.
Evaluates a Quality Product	I don't know how to make my product better.	I need help to understand the best part of my product and what could have been improved.	I understand why my product is good and what could make it better.	I exceed my expectations when producing and improving a quality product.

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INDEPENDENT LEARNING
GUIDELINE #3: STUDENT AS A SELF-DIRECTED LEARNER

Target Indicators	*In Progress*	*Essential*	*Proficient*	*Advanced*
Voluntarily Establishes Clear Information Goals and Manages Progress Toward Achieving Them	Setting information goals is difficult for me. I need help from someone to choose what I'm supposed to do. I work best with problems that have only one answer.	I can set some information goals by myself. I can sometimes find what I'm supposed to do on my own. I see that sometimes there may be more than one solution for my project or problem.	I almost always set my own information goals. I can usually find a variety of information resources to achieve those goals. When there is more than one solution, I choose the appropriate one for my project or problem.	I set my own information goals and choose the best way to achieve them. I explore and evaluate various resources and solutions and use them to create new solutions to the problem. I'm comfortable when there are multiple answers or no best answer.
Voluntarily Consults Media Sources	I usually use the easiest source and only one source.	I can do what is asked of me and usually find answers to questions after consulting a few sources.	I understand how different sources are organized and look for the ones that best meet my needs.	I look at many different sources to find those that meet my needs. I consider various points of view and the merits of the resources before choosing those that work best for me.
Explores Topics Of Interest	I do not enjoy reading and have a hard time staying with a book or other materials. I tend to over-use certain resources to the exclusion of others. I have trouble exploring new topics. Someone needs to help me get started.	I enjoy reading certain types of books and other information resources. I usually read only about one subject or stay with one author's works. I explore new topics when required.	I like reading several different types of literature. I enjoy reading in a variety of formats (e.g. books, CD-ROM, and other media). I read to explore and learn about a variety of topics.	I enjoy reading and exploring many different topics. I consider alternate perspectives and evaluate differing points of view. I read for pleasure, to learn, and to solve problems.
Identifies and Applies Personal Performance Guidelines	I just do what I'm told. Someone tells me if it's good.	I know when I've done a good job.	I know when I've done a good job and know why I was successful. I am satisfied with the results.	I know how I learn best and can choose the method(s), which guarantees my success. I can evaluate what I've done. I'm not always satisfied with my results.

SOCIAL RESPONSIBILITY
GUIDELINE #4: STUDENT AS A GROUP CONTRIBUTOR

Target Indicators	*In Progress*	*Essential*	*Proficient*	*Advanced*
Helps Group Determine Information Needs	I do not participate constructively in a group. I sometimes distract the group. I rely on others to decide what information is needed.	I usually participate to determine the information needs of the group.	I am willing to do what is needed to help determine the information needs of the group.	I assume my appropriate role in the group. I am comfortable leading, facilitating, negotiating, or participating in defining the information needs of the group.
Shares Responsibility for Planning and Producing a Quality Group Product	I am not part of the group and/or rarely take responsibility to help plan the group's information needs.	I help define the jobs and assume responsibility in assisting with task completion.	I help to define jobs and am actively responsible in helping to complete the task.	I help the group go beyond the basic resources. I am responsible for helping synthesize the ideas into a finished product.
Collaborates to Determine Relevant Information	I have trouble participating in a group and I don't listen to the ideas of others.	I sometimes participate in selecting, organizing, and integrating information from some sources.	I work with others to select, organize, and integrate information from a variety of sources.	I actively work with others and help the group select, organize, and integrate information from a variety of sources.
Acknowledges Diverse Ideas and Incorporates Them When Appropriate	I need support to work in a group. I often do not respect input from others	I show respect for the ideas of others.	I encourage team members to share ideas.	I respect and help the group find and incorporate diverse ideas.
Offers Useful Information to the Group, Defends That Information When Appropriate, and Seeks Consensus to Achieve a Stronger Product	I sometimes make the group's progress difficult.	I offer information or ideas but am unable to defend my own ideas or those of others.	I offer and defend information that is brought to the group.	I offer useful information to the group, defend that information when appropriate, and seek consensus to achieve a stronger product.
Clearly Communicates Ideas in Presenting the Group Product	I choose not to participate in the presentation or am unprepared to make a good presentation.	I help in presenting the group product.	I contribute to the group and demonstrate the ability to use a variety of presentation methods.	I work hard in assuring that all contributions from the group are included in the final product. I help the group present effectively using a variety of media.
Evaluates Product, Group Process, and Individual Roles Continuously	I don't work with a group and am not certain how to evaluate the process or product.	I evaluate my own role but need support to apply certain criteria to the group product. I am more comfortable allowing others to do the work.	I effectively evaluate my own role and the roles of others. I continuously apply appropriate evaluation criteria to the group product.	I work with the group to evaluate roles and apply appropriate evaluation criteria to the process and the product. I suggest improvements for the next project.

SOCIAL RESPONSIBILITY
GUIDELINE #5: STUDENT AS A RESPONSIBLE INFORMATION USER

Target Indicators	*In Progress*	*Essential*	*Proficient*	*Advanced*
Practices Ethical Usage of Information and Information Sources	I don't give credit to others when I use their information. I don't know why some things need quote marks and have trouble putting information in my own words. I don't know why I can't use other people's work from books or other information resources.	I can usually put information in my own words. If I use someone else's words, I usually remember to put them in quotes. I can create a bibliography and don't copy other people's work. I know it's against the law to copy disks, tapes, or other materials.	I follow copyright laws and guidelines by giving credit to all quotes and ideas, citing them in notes and the bibliography properly. I only make copies of print, software or tapes when I obtain permission.	I understand and appreciate that copyright protects the creator of the resource, so I always follow and uphold copyright regulations. I do not plagiarize. When I need to copy something, I obtain permission.
Respects Principles of Intellectual Freedom	I usually don't pay attention to what others read, listen to, or view, and I sometimes react inappropriately.	I don't try to keep someone from expressing their own ideas nor reading, listening to, or viewing what they want.	I understand it is important to have many and differing perspectives on a subject. I know I have the right to express my opinion and usually offer my opinion in an appropriate manner.	I can explain the First Amendment rights and, if challenged, know the process available to me to defend those rights. I promote the rights of others and defend them as well.
Follows Guidelines and Etiquette When Using Electronic Information Resources	Someone tells me how to use the information resources and works with me to get the information I need. I spend so much time using the resources that I deny access for others. I need to be reminded of the guidelines for using electronic resources.	I have been trained to use electronic resources, can use them with minimal supervision, and can usually get the information I need without help. I share electronic resources and try to follow appropriate guidelines for their use.	I get the information I need in a reasonable amount of time so others can also use the materials. I follow the guidelines for the use of information resources and use them efficiently.	I serve as a mentor for others who want to learn how to use electronic resources. I use my skills to promote positive and ethical uses of those resources. I use the materials and equipment fairly and carefully.
Maintains the Physical Integrity of Information Resources and Facilities	I know that information resources and facilities have rules and consequences, and sometimes I follow those rules.	I usually follow the rules in my school for use of information resources and accept the consequences when I occasionally break a rule. I never intentionally cause damage to any materials or equipment.	I respect the rights of others by following the rules and never intentionally keep materials from being available to them. I tell someone immediately about any damage I cause or discover.	I appreciate the many resources and facilities that are available to me. I help others follow the rules for the use of equipment and materials. I use materials fairly, carefully, and equitably. I suggest new rules when appropriate.
Recognizes the Need for Equal Access to Materials and Resources	I use some information resources. Sometimes I only use items from home or my classroom but might go to the library during a scheduled class time. I don't like to share.	I go to the library when I need information resources. When my library doesn't have what I need, I know I can ask the librarian to help me find it from another source.	I know it is important for others to have access to information resources, so I usually return items when they are due. When I need materials not available in my school, I seek other sources.	When necessary and appropriate, I use several libraries and online sources to find the information I need. I share resources with others when it is helpful. I follow the rules in all buildings, including returning all materials on time.

RUBRICS WORKSHEET

Student _____ Grade _____ Date _____

Teacher _____ Class _____

Information Literacy Rubrics	In Progress	Essential	Proficient	Advanced
Guideline 1: Student as a Knowledge Seeker				
*Decides what information is needed				
*Develops a plan				
*Locates information				
*Analyzes information to see if it is useful				
*Combines information from different sources				
*Does something with the information				
*Evaluates the results				
Guideline 2: Student as a Quality Producer				
*Understands what a quality product is				
*Plans quality products				
*Creates quality products				
*Presents quality products				
*Evaluates quality products				
Guideline 3: Student as a Self-Directed Learner				
*Sets goal				
*Reads for pleasure				
*Uses media sources for information and personal needs				
*Seeks answers to questions				
*Explores topics of interest				
*Asks for help				
Guideline 4: Student as a Group Contributor				
*Works together to plan a project				
*Decides together what information is needed				
*Respects ideas of others; includes different points of view				
*Offers useful information to the group				
*Clearly communicates ideas				
*Helps evaluate the group project				
Guideline 5: Student as a Responsible Information User				
*Doesn't copy information				
*Gives credit to sources				
*Understands others' rights to choose own reading materials				
*Allows others to have access to electronic resources				
*Takes care of materials				

*Rubric worksheet to be completed by the student based on the proficiency levels defined by the Central Columbia School District, Bloomsburg, PA.

SUGGESTED "TOOLS" TO ASSIST SCHOOL LIBRARY INFORMATION SPECIALISTS TO IMPLEMENT INFORMATION LITERACY

Collaboration Tools

- Curriculum Mapping
- Curriculum Map
- Class Visit Planning Form
- Library Research Information
- Beyond the Term Paper
- Mass-Assignment Alert!
- Group Project Plan

Library Research Tools

- Research Pathfinder
- Essential Search Strategies
- Boolean Operators
- Keyword Search Plan
- Research Planner
- Generic Note Sheet
- Notes Worksheets
- Research Unit Teacher's Assessment Form
- Locating, Evaluating and Managing Resources on the Internet
- Evaluating Web Resources

CURRICULUM MAPPING

Teacher(s) _____ Subject Area(s) _____ School Year _____

CLASS	*MAJOR UNITS TAUGHT* Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June

CURRICULUM MAP

We would like to prepare as early as possible for any major research units you'll be planning for the school year. To help us serve you better, please take a few minutes and jot down your predictions for assignments for the coming year and return it to the library information center.

Month	Research Project	Class/Grade
September		
October		
November		
December		
January		
February		
March		
April		
May		
June		

Teacher _____ Date _____

CLASS VISIT PLANNING FORM

Course Title _____ Teacher _____

Today's Date _____ Visit Date(s) _____ Period(s) _____

Grade _____ Level _____ Number of Sections Assigned _____

1. Briefly describe the project. _____

   _____

2. Content goal(s). _____

   _____

3. Information skill goal(s) _____

   _____

   Assignment begins _____ Assignment is due _____

4. How will students locate materials?

   - ☐ Students will select materials from an assignment sheet. (Please attach a copy of your assignment sheet or other student handouts.)
   - ☐ Students will develop topics independently.

5. What types of materials will students be using?

   - ☐ Periodicals
   - ☐ Books
   - ☐ CD-ROM
   - ☐ Online/Internet
   - ☐ Audiovisuals
   - ☐ Other (list): _____

6. Expected product(s) _____

   _____

7. How will the final product be evaluated? (Please attach a copy of your rubric or assessment tool.) _____

8. If you plan to put materials on reserve, which type of loan would you prefer?

   - ☐ Normal circulation
   - ☐ Overnight
   - ☐ Room use
   - ☐ Other (list): _____

9. What are the major resources you plan to use? _____

   _____

LIBRARY RESEARCH INFORMATION

Grade: _____ Today's Date: _____

Teacher: _____ Course: _____

Unit: _____

Assignment Description (please attach any handouts): _____

_____

Date Assigned: _____ Date Due: _____

Type and Number of Resources to be Used:

Primary Sources:

- ❑ Interview: _____
- ❑ Eyewitness: _____
- ❑ Experiment: _____
- ❑ Observation: _____
- ❑ Historic Document: _____

Secondary Sources:

- ❑ Nonfiction books: _____
- ❑ Fiction books: _____
- ❑ Dictionary (General/Special): _____
- ❑ Encyclopedia: (General/Special): _____
- ❑ Atlas: _____
- ❑ Almanac: _____
- ❑ Indexes: _____
- ❑ Newspapers: _____
- ❑ Popular Magazines: _____
- ❑ Journals: _____
- ❑ Audio-Visuals: _____
- ❑ Online databases: _____
- ❑ Other: _____

Should materials be placed on reserve? _____

Number of classroom research periods scheduled in the library: _____

Requested dates and periods. _____

Number of additional individual research periods students may need: _____

Is this an annual assignment? _____

Pleasant Valley High School Library, Brodheadsville, PA

BEYOND THE TERM PAPER

Dear Teacher:

Although we believe that students need the skills to prepare a thoughtful, well-written term paper, there are other options for a research project. Students can acquire subject knowledge and develop information-management skills through many creative activities. These activities may foster practical and transferable skills students should develop using technology. The following is a list of some enriching assignment ideas for your class. For any research products consider how technologies like videotape, desktop publishing, or multimedia authoring might enhance students communication of the knowledge they have gained. Stop by the school library information center and together we can plan and discuss project ideas, available resources, and evaluation options.

Your School Library Information Specialist

1. *Annotated bibliography:* Research for a variety of materials on their topic and evaluate them for relevance, scope, point of view, and credentials of the author. Their bibliographies may be useful for future researchers.

2. *Multimedia stack:* Prepare interactive resumes for historical figures or create interactive travel brochures advertising a country or period in time.

3. *Newsletter:* Using a desktop publishing program, students set their newsletters in another time or place. They create classified ads, theater and book reviews, sports stories, and business information. This is a perfect collaborative project.

4. *Debate:* Choosing two historic figures and an issue, students "duke it out." Videotape the debate for later discussion.

5. *Brochure:* Using a desktop publishing program, students create three or four-fold flyers to advertise a product they've developed or a place they've researched.

6. *Resume:* Using a desktop publishing program, students create a professional-looking resume for a famous person and attach a cover letter. They might simulate an interview of the historical figure applying for a job at a university or business. Students present the resumes and "sell" their characters.

7. *Database:* Students collect and organize facts on any topic with an eye toward comparing information for patterns. They create a chart or graph to illustrate conclusions. For example, the topic of Italian Renaissance artists could be presented through charts to compare style, training, colors used, and subjects of paintings.

8. *Family tree:* Students design a tree for a character in a novel. They can make the boxes large enough for illustrations and character descriptions.

9. *Press conference with famous people of a time period:* Select a group of famous people to be interviewed and have the bulk of the class prepare questions. Students being interviewed should prepare well enough to imagine what their famous person might have said.

10. *Trip itinerary:* Students studying countries or states prepare a detailed itinerary listing sites of importance, what to pack, money exchange, temperature for the season, where to stay, how to get from place to place, special events, etc.

11. *Detailed diary entry:* For a fictional or historical character, students imagine what a real day would be like and include interaction and quotes from family and friends.

12. *Mock trial for a controversial historical figure:* Bring Napoleon, Hitler, Socrates, Lee Harvey Oswald, or Richard Nixon in front of a well-prepared class made up of jurors, attorneys, witnesses, and a judge.

13. *Board game:* Let an event in history or a novel inspire a truly playable game. Host an hour of game playing in the classroom as your evaluation.

14. *Web home page:* Web pages can advertise fictitious businesses, invented products, or present electronic resumes.

15. *Visit by a person in history to the school:* Students plan an entire visiting day and record the visitor's reactions to gym, lunch, your classes, the mall, etc.

16. *A day in the life of plant/machine/disease/person:* Students prepare an essay or speech in first person to give the class a better idea of the history and daily life of the AIDS virus, for instance.

17. *Awards event:* Students plan a science fair for famous scientists; Grammy awards for classical musicians. Students write detailed acceptance speeches and plan the entertainment.

18. *Dinner party:* Students invite people from a particular period and plan what to serve and who will sit next to whom.

19. *Historic experience simulation:* Try a Civil War battle or a day at Ellis Island. Assign each student a role.

20. *Skit:* Students represent a typical day at a job for a career project or a major historical event.

21. *Postage stamp for a person or event in history:* Students attach the desktop-published stamp design to a three-paragraph essay describing why the subject was important enough to deserve a commemorative stamp.

22. *Rap song:* Students use rap to explain a concept or event.

23. *Picture book:* Students explain a concept or event through pictures and captions.

24. *Phone message or telegram:* Students write a message from one historic character to his or her spouse or other contemporary about an important event.

25. *Interview an actual person by phone, e-mail, or in person:* One way to find an expert is to find an appropriate listserv or mentor on the Internet. Students locate a good home page and e-mail its Webmaster.

26. *CD or album cover:* Students design a cover to represent an event and plan the songs with descriptions. They decide who would be the producer and musicians.

27. *Baseball card:* For a historical figure, students prepare a card-like poster including statistics and quotes.

28. *Crossword puzzle or word search:* Students use related vocabulary.

29. *Petition:* Students lobby for or against an issue they have researched.

30. *"This Is Your Life" television show:* Students videotape or enact the show complete with guests, illustrations, and special surprises.

31. *Epitaph and obituary or eulogy:* Focusing on a person in history, students write epitaphs for tombstones, write newspaper obituaries, or deliver eulogies.

32. *Recipe:* What ingredients and conditions would students need to create an American Revolution? How would they prepare and cook their recipes?

33. *Photograph album:* Students label all the pictures in their albums and share personal anecdotes with the class. Could be creatively extended to be the album of a disease, animal, or invention.

34. *Political cartoon:* Students satirize a political or historic person or event.

35. *Monologue:* More-dramatic students may opt to create a scene from the life of a famous person.

36. *Want ad:* Students compose an ad requesting personnel to solve a problem in history.

37. *Timeline:* Making a wall-sized, annotated, and illustrated timeline, students include important quotes.

38. *Soap opera based on a historical event:* Students can add lots of drama and interesting characters.

MASS-ASSIGNMENT ALERT!

To: _____ , Public Librarian

Fax #: _____

Date: _____

Dear Public Library Colleague:

We wanted to alert you to a major research project that has been assigned in our school. You may want to keep some of your materials on reserve to meet student demand and more equitably distribute your resources. Here are some details you may find helpful.

Teacher _____ Subject/Class _____

Grade _____ Approximate No. of Students _____ Date Due _____

Project/Assignment _____

Expected Product _____

A copy of the student assignment sheet is attached for your convenience. Please feel free to contact us with any questions.

School Library Information Specialist _____

School _____

Phone _____

E-mail _____

Fax # _____

GROUP PROJECT PLAN

Project title:

Names of group members Responsibility

1.

2.

3.

4.

5.

6.

The goal of our project is:

Questions we hope to answer:

Project format:

Resources we plan to use:

Date we expect to complete first draft: Final product:

Questions for teacher/school library information specialist:

RESEARCH PATHFINDER

Following the steps below, finding information for your topic will be much easier. Limit your search to the last five years to maintain current information.

1. What is your topic? _____
   List keywords you would use to locate information:

2. Use a general encyclopedia to locate information to provide a broad understanding of your topic. Suggested encyclopedias are *World Book Online* and *Encyclopedia Americana*.

3. Use the Online Catalog and search the nonfiction collection for any resources on your topic. Write down the call numbers and titles and retrieve from the shelves.

4. Use ACCESS PA, **Express F3** to search, limit your search to the Senior High. Select one title and print the holdings record. Write the title below. Turn in the holdings record to request the resource. **Remember ALT-F7 to print!**

5. Use *Power Library* and your keywords to locate one magazine article on your subject. Write the title and date of magazine below and then print the article.

6. Use *ProQuest Direct* to locate an additional article that is not found in *Power Library*. Write the title below and print out the article.

7. Use *New York Times Current Events* to locate a news article that is not found in *ProQuest*. Write the date and title below and print out the article.

8. Use *SIRS Researcher* to locate an article. Use your keyword to search. Scan the abstracts, select one and print out the article. Write down the title below.

********Don't Forget To Ask If You Need Help********

ESSENTIAL SEARCH STRATEGIES

If you are not happy with your results, try another search engine; check your spelling; or try synonyms or related, broader, or narrower terms. By all means, use *some* strategy. Though they have many quirks, most engines allow users the following advance techniques.

Search Strategy	Explanation	Examples
Boolean operators	AND limits your search, requiring that both or all words appear.	Vietnam AND protest AND students Japan AND cooking
	OR is used to capture synonyms or related words.	car OR automobile coronary OR heart
	NOT eliminates possibilities that you suspect will cause problems.	Martin Luther NOT King China NOT dishes
	(Some search engines use + and for AND and NOT.	
Wildcards	An asterisk (*) or a question mark (?) may often be used to stand for any character or string of characters.	teen* (picks up teen*age*, teen*agers*, or teens) Herz? (for Herz*egovina*) wom?n (for wom*an* or wom*en*)
Natural language searches	Some search engines allow you to type in questions as you would think or speak them.	Why is the sky blue?
Phrases	You often will want words to appear together in specific order. Commonly, quotation marks (" ") set words off as phrases to be searched as a whole. (Some search engines use parentheses, commas, or hyphens instead of quotation marks.)	"vitamin A" "bed and breakfast" "George Washington Carver"
Proximity	Words often are not meaningful in your search unless they appear near each other in a document. In large documents, words separated by lots of text are generally unrelated. ADJ specifies that two words appear next to each other. NEAR/25 specifies that two words appear within 25 words of each other.	global ADJ warming Eric Clapton NEAR/10 Cream

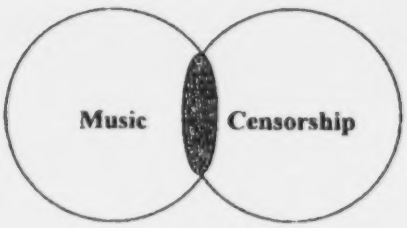
Valenza, Joyce Kasman. *Power Tools: 100+ Essential Forms and Presentations for Your School Library Information*. Chicago: ALA, 1998.

Search Strategy	Explanation	Examples
Field searching	This feature restricts searches to certain portions of Web documents. It allows you to specify that the search words appear in the title, URL, or first paragraph.	title: cancer URL: edu
Nesting	Nesting allows you to create more complicated search statements combining Boolean operators using parentheses.	(car OR automobile) AND Saturn
Case sensitivity	Most search engines are case sensitive by default. However, there are some that recognize uppercase and lowercase variations.	Baker (retrieves name and eliminates reference to cake and bread makers) AIDS (eliminates reference to helpers) China (eliminates references to dishes.

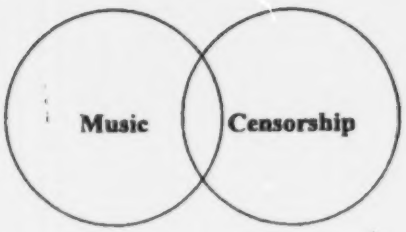
Valenza, Joyce Kasman. *Power Tools: 100+ Essential Forms and Presentations for Your School Library Information*. Chicago: ALA, 1998.

BOOLEAN OPERATORS

music AND censorship



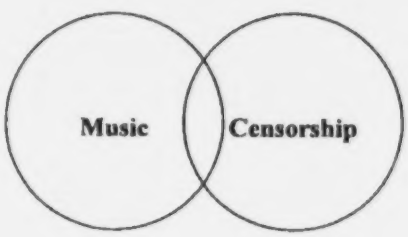
Retrieves records containing both the "ANDed" terms.



music OR censorship

Retrieves records containing both the "ORed" terms.

music AND NOT/NOT censorship



Retrieves records that do not include the specified term.

Valenza, Joyce Kasman. *Power Tools: 100+ Essential Forms and Presentations for Your School Library Information.* Chicago: ALA, 1998.

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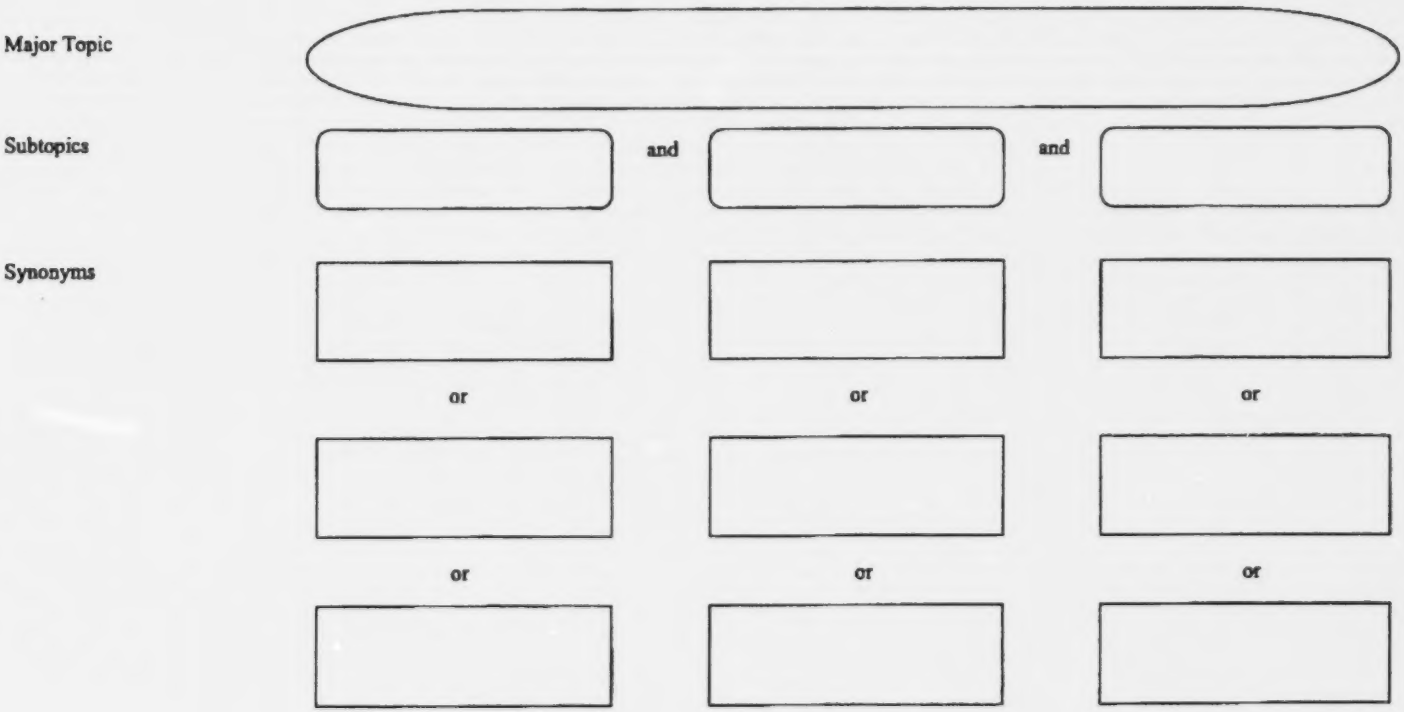
KEYWORD SEARCH PLAN

Before you begin your search it is important to have a plan. Brainstorm your main concepts across, connected with "and." Synonyms and related terms ("ors") can be listed in the vertical columns.



703

Valenza, Joyce Kasman. *Power Tools: 100+ Essential Forms and Presentations for Your School Library Information.* Chicago: ALA, 1998.

GENERIC NOTE SHEET

Source _____ Name _____ Date _____

Main ideas/subtopics **Detailed notes, exact quotes, supporting evidence, page numbers**

Bibliographic information

Valenza, Joyce Kasman. *Power Tools: 100+ Essential Forms and Presentations for Your School Library Information*. Chicago: ALA, 1998.

Name _____

Book Notes
Worksheets

Author(s)/Editor _____

Title _____

Publisher _____

City/State of Publication _____ Copyright Date _____

Notes/Quotes (Pages) _____

_____

_____

_____

_____

Subtopic _____ Sheet # _____

Name _____

Book Notes
Worksheets

Author(s)/Editor _____

Title _____

Publisher _____

City/State of Publication _____ Copyright Date _____

Notes/Quotes (Pages) _____

_____

_____

_____

_____

Subtopic _____ Sheet # _____

Valenza, Joyce Kasman. *Power Tools: 100+ Essential Forms and Presentations for Your School Library Information.* Chicago: ALA, 1998.

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Name _____

Periodical Notes Worksheets

Author(s) _____

Title of Article _____

Magazine _____

Date _____ Page #s _____

Notes/Quotes (Pages) _____

_____

_____

_____

_____

Subtopic _____ Sheet # _____

Name _____

Periodical Notes Worksheets

Author(s) _____

Title of Article _____

Magazine _____

Date _____ Page #s _____

Notes/Quotes (Pages) _____

_____

_____

_____

_____

Subtopic _____ Sheet # _____

Valenza, Joyce Kasman. *Power Tools: 100+ Essential Forms and Presentations for Your School Library Information.* Chicago: ALA, 1998.

Name _____

CD-ROM Notes Worksheets

Author(s) _____ Title of Article/Segment _____

Title of Database _____

Publisher _____ City/State _____

Electronic Publication Date _____ Medium CD-ROM

Notes/Quotes (Pages) _____

_____

_____

_____

_____

Subtopic _____ Sheet # _____

Name _____

CD-ROM Notes Worksheets

Author(s) _____ Title of Article/Segment _____

Title of Database _____

Publisher _____ City/State _____

Electronic Publication Date _____ Medium CD-ROM

Notes/Quotes (Pages) _____

_____

_____

_____

_____

Subtopic _____ Sheet # _____

Name _____

World Wide Web
Note Worksheets

Author(s) _____

Title of Database _____

Title of Larger Work _____

URL (address) _____

Date of Document _____ Date of Access _____ Medium Online

Notes/Quotes (Pages) _____

_____

_____

_____

Subtopic _____ Sheet # _____

Name _____

World Wide Web
Note Worksheets

Author(s) _____

Title of Database _____

Title of Larger Work _____

URL (address) _____

Date of Document _____ Date of Access _____ Medium Online

Notes/Quotes (Pages) _____

_____

_____

_____

Subtopic _____ Sheet # _____

RESEARCH PLANNER

BRAINSTORMING KEYWORDS

Topic

	&	&
or	or	or
	&	&
or	or	or
	&	&
or	or	or
	&	&

THESIS

Idea one	Idea two	Idea three

Conclusion

Databases to search

Dewey numbers/book titles

Descriptors found in searching

Synonyms

Broader/narrower

Proper nouns (names, places, organizations, companies)

Alternate spellings

Promising Web sites/URLs

Valenza, Joyce Kasman. *Power Tools: 100+ Essential Forms and Presentations for Your School Library Information.* Chicago: ALA, 1998.

RESEARCH UNIT TEACHER'S ASSESSMENT FORM

Teacher _____ Unit/Lesson _____ Date _____

	Poor ←				→ Excellent
1. How would you rate the success of the unit?	1	2	3	4	5
2. How would you rate the quality of student projects?	1	2	3	4	5

3. Should we attempt this project again next semester/year?
   - ☐ Yes
   - ☐ No

   Comments:

4. What recommendations do you have for improving the assignment for next time?

5. Were your subject area and information skill goals reached?
   - ☐ Yes
   - ☐ No

   Comments:

6. What materials would you like the library to add to better support this project?

Please return this form to the library.

LOCATING, EVALUATING AND MANAGING RESOURCES ON THE INTERNET

Web Site Evaluation

Authority/Credibility: Who owns the web site and why?

Is the author's name and e-mail address included?
Is the web site affiliated with any major institutions or organizations?
What is the expertise of the individual or group that created the site?
Does the author's/group's affiliation appear to bias the information?
Is the purpose of the web site stated?
Is personal information requested from the user?

Content: Does the web site contain accurate, reliable information?

When was it last updated?
Is the content meaningful and useful?
Does it contain original content?
Is any sort of bias evident?
Does the content appear to be accurate?
Does it contain primary source material?
Are the links up-to-date?
Are the links annotated? evaluated?
Is the grammar and spelling correct?

Design and Technical Features: Is the web site well designed and does it operate efficiently?

Are the pages uncluttered with useful headings and subheadings?
Do the icons clearly represent what is intended?
Can you use a text-based browser?
Is the web site accessible at most times of day?
Is the design consistent throughout the site?
Does it load in a reasonable amount of time?
Are there clear directions for locating and installing helper applications?
Can you print the contents of the page?

Berger, Pam. *Using the Internet to Enhance Your Library Program*. Medina, WA: Institute for Education Development, 1998.

LOCATING, EVALUATING AND MANAGING RESOURCES ON THE INTERNET

Web Site Evaluation continued...

Navigation: Can you move around the web site easily?

Do external and internal links work?
Are the links clearly and accurately described?
Can you easily return to the home page from supporting pages?
Is there a searchable index, a site locator map or a help screen?
Are the navigation icons consistent throughout the site?

Curriculum Connections: Does the web site support or enhance the curriculum?

Does the content correlate to the curriculum?
Does it support national and state standards?
Is the content unique and not available elsewhere?
Does the site offer instructional support materials?
Are the program objectives clearly stated?

Learning Environment: Is the site designed to take advantage of the unique capabilities of the Web? (access, up-to-date information, publishing and communication)

Does the site provide ways for learners to share and display their work?
Does the site invite student input or collection data?
Does the web site offer interactive opportunities?
Are student contributions and communications screened prior to posting?
Does the site offer access to information usually not available in school libraries?
Does the site offer access to current information?

Berger, Pam. *Using the Internet to Enhance Your Library Program*. Medina, WA: Institute for Education Development, 1998.

EVALUATING WEB RESOURCES

Web Site: _____

URL: _____

Yes	No	NA	
			Authority/Credibility – who owns the web site and why?
			Is the author's name and e-mail address included?
			Is the web site affiliated with any major instructions?
			What is the expertise of the individual or group that created the site?
			Does the author's/group's affiliation appear to bias the information?
			Content – Does the web site contain accurate, reliable information?
			Is the purpose of the web site clearly stated?
			Was it updated recently? When? _____
			Does it contain meaningful and useful content?
			Does it contain original content?
			Is any sort of bias evident?
			Does the content appear to be fact or opinion?
			Does the information appear to be accurate?
			Does it contain primary source material?
			Are the links up to date?
			Are the links evaluated?
			Is the grammar and spelling correct?

Berger, Pam. *Using the Internet to Enhance Your Library Program.* Medina, WA: Institute for Education Development, 1998.

GLOSSARY

ACCESS

The ability and freedom to obtain and use resources and services without unnecessary limitations.

ACTION PLAN

An implementation guide based on identified goals and objectives that includes a timeline and identifies who will be responsible.

ASSESSMENT

Documentation that provides evidence of student attainment of standards; used to modify and direct instruction.

BENCHMARK

A concrete statement of skills and knowledge to be demonstrated at a specific performance level; in the Pennsylvania Academic Standards, benchmarks are specified at grades three, five , eight and eleven.

BOOLEAN

Commands used to show logical relationships between two or more search terms (and, or, not); term is derived from a British mathematician, George Boole.

COLLABORATION

Comprehensive formal and informal planning in which goals, implementation and evaluations are shared for the benefit of all.

CURRICULUM MAPPING

The process a school or district engages in when the educators want to make a precise, honest inventory of instructional practices on a day-to-day, month-by-month basis; maps may include instructional processes, end products, information problem-solving steps, resources used, and other characteristics used to describe instructional activities.

DESCRIPTOR

A word or phrase used to describe the subject matter of a document.

FLEXIBLE SCHEDULING

A method of scheduling instructional activities and curriculum units in the library that are collaboratively planned by teachers and school library information specialists to meet the needs of students at the point of need; lack of fixed or rigid weekly schedule.

IMPLEMENTATION

Putting a plan into action.

INFORMATION LITERACY SKILLS

Competencies that enable students to locate, interpret, organize, analyze, synthesize, evaluate, and utilize data, facts, or knowledge from a variety of resources.

INTEGRATED INFORMATION LITERACY CURRICULUM

A series of written instructional plans that integrate information literacy skills objectives and content-area objectives to enhance student learning.

PERFORMANCE INDICATORS

A specific description of a standard in terms of observable and assessable skills.

RESOURCE-BASED LEARNING

The use of a wide variety of print, nonprint, electronic, and human resources to access information needed to solve intellectual or informational problems.

RUBRIC

A scaled set of criteria that clearly defines for the student and the teacher what a range of acceptable and unacceptable performances looks like.

SCHOOL LIBRARY INFORMATION CENTER

An area or system of areas located in a school building where a full range of information resources, equipment, and services provided by certified library information staff are made available and accessible to students, teachers, and administrators.

SCHOOL LIBRARY INFORMATION PROGRAM

The instructional objectives, activities, facilities, resources, equipment, and staff that are utilized to assist students to develop information processing skills provided by certificated library information staff.

SCHOOL LIBRARY INFORMATION SPECIALIST

A person who has appropriate certification and broad professional preparation both in education, library science, and instructional technology with competency to carry out a school library information program.

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122

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COLLABORATION

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Fall 1996

AMERICAN ASSOCIATION OF SCHOOL LIBRARIANS
A DIVISION OF THE AMERICAN LIBRARY ASSOCIATION

The "Meeting in the Middle" Experience

In August 1994, the American Association of School Librarians (AASL), a division of the American Library Association, sponsored a five-day institute, Meeting in the Middle, intended to foster collaboration among library media specialists, teachers and administrators in middle schools. (Primary funding for Meeting in the Middle came from the U.S. Department of Education through an HEA Title IIB Summer Institute grant program.)

Directed by Barbara Herrin, AASL Director of Professional Development, the institute brought 15 teams of teachers, administrators and library media specialists from disparate parts of the United States to the nation's middle – Kansas City – to work together planning student-centered learning activities. When the teams returned home, they were asked to implement a teaching plan developed at Meeting in the Middle and to model the collaborative planning process in their home school districts.

When the 1994-95 school year was over, the teams were asked to submit reports highlighting their experiences during the year. An analysis of those reports follows this paper's definition and discussion of collaboration.

A Definition of "Collaboration"

Collaboration is essential for the successful integration of information skills instruction into curriculum subject areas. But collaboration is often used to mean cooperation or coordinating, and there's a big difference among the three terms.

Cooperation is informal, with no commonly defined goals or planning effort; information is shared as needed (Mattessich and Monsey, 1992, p. 7). A library media specialist and teacher in a cooperative relationship work loosely together. Each works independently, but they come together briefly for mutual benefit.

Coordinating suggests a more formal working relationship and the understanding of missions. Some planning is required and more communication channels are established (Mattessich and Monsey, 1992, p. 7). In a library media program, the teacher and library media specialist make arrangements to plan and teach a lesson or unit, and a closer working relationship is required.

Collaboration is a much more prolonged and interdependent effort. As Winer and Ray (1994, p. 24) note, collaboration changes the way we work.

Collaboration moves from:

- Competing to building consensus.
- Working alone to including others from different fields and backgrounds.
- Thinking mostly about activities and programs to thinking about larger results and strategies.
- Focusing on short-term accomplishments to requiring long-term results.

The levels of collaboration, summarized by Winer and Ray (1994, p. 22), are found in the table below.

In summary, collaboration is a working relationship over a relatively long period of time. Collaboration requires shared goals, derived during the partnership. Roles are carefully defined, and more comprehensive planning is required. Communication is conducted at many levels to ensure success. Leadership, resources, risk, control and results are shared. As a result of collaboration, there is a substantial benefit: "More is accomplished jointly than could have been individually." (Mattessich and Monsey, 1992, p. 40). ■

Cooperation	Coordination	Collaboration
Short term	Longer term	Long term
Informal relations	More formal relationships	More pervasive relationship
No clearly defined mission	Understand mission	Commitment to a common mission
No defined structure	Focus on a specific effort or program	Results in a new structure
No planning effort	Some Planning	Comprehensive planning
Partners share information about the project at hand	Open communication channels	Well defined communication channels at all levels
Individuals retain authority	Authority still retained by individuals	Collaborative structure determines authority
Resources are maintained separately	Resources and rewards are shared	Resources are shared
No risk	Power can be an issue	Greater risk power is an issue
Lower intensity	Some intensity	Higher intensity

125 BEST COPY AVAILABLE

Factors Necessary for Collaboration

Mattessich and Monsey (1992) compiled and analyzed the body of research on collaboration. The six factors which influence success of collaboration, as determined by the research literature include:

1. environmental factors, such as a history of collaboration and support from opinion leaders;
2. group membership characteristics, especially a shared respect among group members and belief in the benefits of collaboration;
3. process/structure, usually shared decision making and flexibility;
4. effective communication among team members;
5. purpose, i.e., members share the same vision for their work; and
6. adequate resources.

These factors are used as a framework for describing what we learned from Meeting in the Middle teams when they returned home and implemented ideas from the institute. ■

Lessons Learned about Collaboration

During the school year after Meeting in the Middle, participating teams were asked to develop collaborative interdisciplinary units. The teams were asked to prepare a brief report on the interdisciplinary unit and to write a synthesis paper that described the collaborative planning and implementation process in which they engaged. They were asked to discuss how and when the team planned, difficulties they experienced, what they learned about their team and how they worked together, what they would do differently in the future, and what they still need to know to be able to be more effective working collaboratively.

The following is an analysis of responses from 11 teams and four journals kept by participants during the school year.

Environmental Factors

Lesson 1. School culture must support collaboration. If there is no history of collaboration, a leadership team must provide an example for others to follow. Here's how one school's leadership team provided a model:

> Early in the year, we modeled our unit we planned in Kansas City for the entire faculty. That helped them to see what a bonus collaboration can be. There has been more interaction among teachers, the library media specialist and the administration. *Tyner Middle School, Chattanooga, Tennessee*

After modeling, the leadership team should continue to provide leadership. For example, one Meeting in the Middle team was designated the collaboration "gurus."

> The interdisciplinary activity began "...with the Meeting in the Middle persons acting as 'gurus' for the project. The gurus were responsible for developing agendas for meetings, for spearheading plans and for taking responsibility for detail work. Team representatives from all parts of the building served as a sounding board for the project's direction." *Madison Junior High, Naperville, Illinois*

Lesson 2. Flexible scheduling is a vital component of collaborative planning and work. Collaborative teaching requires flexibility in the daily schedule to plan learning activities and to enable teaching teams and students to meet together.

> The [collaborating] team's flexible scheduling allows for activities that involve the entire team, small cooperative learning groups for researching and presenting, and individual learning with projects such as poetry and letter writing. *Central Middle School, Edmund, Oklahoma*

> We need more planning time, but we are adopting a seven day period next year which allows us to have team and individual planning daily. This will make the collaborative process more effective. *Gridley Middle School, Tucson, Arizona*

Lesson 3. The library media specialist can and should be a leader of the efforts to collaborate:

> Across the school, cooperative units began to happen, most often with our very own library media specialist at the center of the network. *Harpeth Hall School, Nashville, Tennessee*

Lesson 4. Expect apathy and/or dissent among faculty. Employing a new concept like collaboration takes time and patience. Even when faculty apparently accept the idea, many because of apathy or general lack of enthusiasm, will not participate.

As an example of apathy, the faculty in one school were surveyed in August to determine their interest in a

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school-wide thematic unit for the year. Given a choice, the faculty overwhelmingly supported wellness as a schoolwide theme by a vote of 47-10 (plus 6 who indicated either of two themes would be okay). Of 75 staff, 12 did not respond. As the school year progressed, so did the apathy. The apparent vote of confidence for collaboration (47-10) deteriorated during the year, as indicated in this journal entry:

> I was extremely disappointed in the staff. They chose at the beginning of the year to accept wellness as an overall school theme for the year. I feel they did minimal. There were staff members who worked it in through homeroom and in their classes. I would hazard to guess that the majority did not.

Here's how one team dealt with apathy:

> Staff apathy toward "yet another new idea" worried [collaborative team] members intent upon sharing a new approach to teaching. Reasoning that "modeling" was better than "talking," presentations to the faculty were confined to a five-minute promotion during the August teacher-orientation, a January role-playing session and a half-hour program prior to the two-week, school-wide finale. The culminating activity was deliberately scheduled to allow parents attending parent-teachers conferences to visit. *Show Low School, Show Low, Arizona*

Group Membership Characteristics

Lesson 5. Members of the collaborating group must share an understanding and respect for each other.

Essential to collaboration is a shared team-building experience, which Meeting in the Middle provided. It was clear from the institute products that the Meeting in the Middle experience was central to the collaboration that occurred during the ensuing school year. Nearly every report commented on the value of the experience. The activities and philosophy, which they learned at Meeting in the Middle, was a central point of reference for all of those who attended.

Sharing an understanding and respect for each other leads to utilization of the individual differences of group members:

> Throughout the year, we have learned how well we work together. We have explored ways of thinking about curriculum and education. We have encouraged students to become involved in problem solving, critical thinking, question posing, and valuing and expanding their understanding of the meaningful applications that collaborative work brings to their education process. We have listened to each other and offered suggestions. *Metairie Park Country Day Middle School, Metairie Park, Louisiana*

Personal relationships must be cultivated. Collaborators must trust each other:

> In a general sort of way, our teams have learned a great deal about working together. We know that a team can get twice as much done as individuals working in isolation. We learned about each other from the Myers-Briggs profile, and in general became more understanding of each other's viewpoints and learning styles. *Harpeth Hall School, Nashville, Tennessee*

Lesson 6. It takes the whole team at every meeting to have real cooperation.

> As the administrator, I was often absent from meetings and my absence caused confusion and frustration that was unnecessary. *Harpeth Hall School, Nashville, Tennessee*

Likewise, the shared experience of Meeting in the Middle was important; one teaching partner did not attend Meeting in the Middle:

> It is too bad that he was not one of the original participants [of Meeting in the Middle]. Although he was supportive and interested, it was not a priority for him.

Lesson 7. Things will not go smoothly all of the time. Be prepared for frustration.

> I feel that I am pulled in so many different directions with all my responsibilities—books, computers, av equipment, professional activities, CD-ROM projects, teaching, administrative duties, technology plan in the building. I have learned to take time for me, which I do at night, but it is exhausting. *Journal Entry*

> The planning time to change course units to collaborative units seemed overwhelming. We experienced frustrations when units did not work quite as well as planned. Some of us found our new roles as facilitators more of a transition than we expected. *Metairie Park Country Day Middle School, Metairie Park, Louisiana*

Process/Structure

Lesson 8. Every level within the school (administrators, teachers, library media specialists) must participate in decision-making.

> Our weekly meetings have enabled the librarian, principal and three subject area teachers to communicate regularly. Because the librarian is aware of what the teachers are doing in their classrooms, she

has been able to pass on pertinent information about cooperative learning projects to instru tors outside of the middle school. The principal's involvement has ensured the team that its efforts are understood and supported....We have seen carryover from one class to another in the students' ability to work cooperatively in groups. *Metairie Park Country Day Middle School, Metairie Park, Louisiana*

Lesson 9. School administrators and other decision-makers must support the concept of collaboration.

Decision makers should be involved early. For example, the team from Show Low, Arizona, first introduced the concept of collaboration to the school board and the school staff before they began detailed planning of their year-long unit on oceans.

At Madison Junior High School in Naperville, Illinois, the administration became directly involved in a schoolwide wellness unit; they issued a weight loss challenge to the faculty. This six-week activity culminated with a wellness luncheon in March.

Lack of commitment from administration may result in the following:

> Our final challenged took place in the planning phase of the [end-of-year activity]. This past year our district has been undergoing significant changes in central administration structure and personnel as well as significant unrest due to a failed referendum, diminishing resources, and an unclear sense of district priorities expressed by the Board. What began as a commitment to a totally building-based institute day changed at least three times. Planning of speakers and activities was continually changing and ultimately [we had] a wonderful exercise in stress management. *Journal Entry*

Lesson 10. The group is flexible in the way it organizes and accomplishes its work. This is especially true of time management:

> Difficulties for us are the difficulties everyone has who teaches in middle school. For every class we teach, we need THREE planing periods to get it right! Our team meetings at every grade level functioned with success, but we NEVER had enough time to work on curricular planning AND see to the individual needs of our students. *Harpeth Hall School, Nashville, Tennessee*

Lesson 11. Staff development is essential. Background is needed for collaboration, and the Meeting in the Middle institute gave teams a common experience from which to draw ideas and inspiration during the ensuing school year:

> ...though we really had many of the pieces of a real team in place, we were able to work from a body of knowledge that helped us to become a more cohesive unit at each grade level. *Harpeth Hall School, Nashville, Tennessee*

Communication

Lesson 12. Collaborating group members communicate often, openly discuss issues and convey necessary information to one another and to people outside their group:

> We have learned a lot about each other during this year. We have learned that a unit of study is much easier to do when four or five people are working on it together. Groups of people can pull together many more resources than a single teacher is able to. A unit of study can be much more thorough and interesting when the talents of several participants are combined. Working together this way also draws you closer as a team. We have functioned much better this year just because we understand each other better and respect each other's ideas. *Tyner Middle School, Chattanooga, Tennessee*

Purpose

Lesson 13. Goals and objectives of the collaborative group must be attainable and understood by all group members. Teams shared a vision or philosophy. For example, the Edmond, Oklahoma team captured their philosophy with this quote:

> "We must view young people not as empty bottles to be filled, but as candles to be lit." *Robert H. Shaffer*

To encourage collaboration among colleagues, demonstrating collaboration is important. Outcomes/goals must be clearly communicated, as illustrated below:

> This is the first time any of us have met with colleagues on a regular basis to share ideas about teaching. We shared our plans and our classroom experiences. We found that sharing ideas with each other was helpful. Our ability to problem solve with each other was energizing. Since most of the classroom teachers were too busy to find relevant articles, it was beneficial for the librarian to provide them for the team. Sharing our experiences with the middle school faculty generated interest in cooperative learning. *Metairie Park Country Day Middle School, Metairie, Louisiana*

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Lessons learned about teams

1. Teams have a personality that overrides individuals....I have observed real measurable differences in the ways individuals act on the seventh grade team and the ways those same folks act on the eighth grade team!
2. A clear agenda for each meeting is crucial. Otherwise curriculum issues are not covered, and personalities control the meetings.
3. Frequent "philosophical" discussions help the perspective of the team. It is very easy to become embroiled in the every dayness of the school.
4. Teams make large faculty meetings go better. We had an in-service day on April 27, and we met as a whole faculty (16 or so people) from 8.30 a.m. until 3:30 p.m. with one break and lunch. We accomplished a great deal, and worked together very well. It is all that practice in teams.

Observations by Lindy Sayers, Principal, Harpeth Middle School, Nashville, Tennessee

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Resources

Lesson 14. Essential resources (time, facilities, learning resources, budget) must be provided to assure success. The library media center can be a source of support for interdisciplinary teaching:

> Library media center support prevents the lack of a [collaborating team] budget from hampering some projects; the LMC gave first priority to print and nonprint materials supplementing the oceans program. Justification for doing so was based on the cross-curriculum, cross-grade level, and long-term nature of usage of the materials. *Show Low School, Show Low, Arizona*

Perhaps the resource most important to successful collaboration is time:

> The major obstacle to success proved to be a lack of time to meet. No specific allocation of school time for the [collaborating team] meant multiple conflicts as members balanced other commitments with the work at hand. *Show Low School, Show Low, Arizona*

Facilities can also be a factor in team teaching success:

> I also believe the size of our school is a factor. We have 930 students and every room is in use. Even when we do a team unit we have no place to meet as a large group for a block of time. *Journal Entry*

Conclusion

Collaboration is hard work with many rewards—it's a journey, not a destination, with students as the beneficiaries of creative team efforts of library media specialists, teachers and administrators. Establishing collaboration for teaching takes a long time and requires nurturing. Ellen Correll, library media specialist at Tyner Middle School in Chattanooga, Tennessee, summed up her experiences during the year following Meeting in the Middle:

> We have tried to be role models for the rest of our teachers at Tyner Middle. And collaboration has developed as the year has progressed. We have a long way to go as whole teams collaborating, but I see progress. What I have noticed is a willingness on the part of individual teachers to involve me more in their planning. We have carried out some wonderful projects this year involving just one or two teachers and myself—projects that may never have happened if our group had not begun as a model. Every change I have ever been involved in has started as a small unit and grown. That is what I see happening now. ■

Benefits of Collaboration

While lessons were learned regarding the "how to" of collaboration, other lessons were learned about its benefits. Below, in their own words are the benefits claimed by Meeting in the Middle collaborators:

1. **Students are more involved in learning, and their work is more creative.**

   Our greatest success has been with our students. They have been much more involved in learning. They have shown a lot of creativity in their projects. We have seen them in a different role as we have branched out to do more. Their scrapbooks, posters and their ocean biome in a clear bubble have all shown so much creativity. The students are interacting to a greater degree and learning more as a result. They have also become more competent and secure in their use of the library. Tyner Middle School, Chattanooga, Tennessee

2. **Collaboration "ignites" creativity among teachers, and the "creative fire" spreads to learners.**

   Our teamwork and collaboration provided teachers the opportunity to use creative ideas to ignite a continued interest in the project. We used games, puzzles, dramatizations, "imaginary" tours, storytelling, videos, food tasting, students becoming the teachers, writing a song, and other successful approaches to teaching and learning. Central Middle School, Edmond, Oklahoma

3. **Modeling collaboration results in more collaboration among faculty in the school.**

   Our team's collaborative efforts have begun to have an impact on the whole school. More and more collaboration is taking place on other teams. Tyner Middle School, Chattanooga, Tennessee

4. **Modeling collaboration influences students, teachers and parents, who learn to share ideas.**

   The entire school community, including parents, are learning to share ideas without fear of rejection. We are seeing more hands-on experiences and less teacher lectures, group work instead of strictly individual activities, research instead of being fed everything from the teacher. Students are becoming more self-confident in making class presentations. They can demonstrate their learning through projects, experiments, oral presentations, artwork, storytelling, video clips, contests – the list is endless. It all comes back to increased interaction between all persons at the school. Tyner Middle School, Chattanooga, Tennessee

5. **Teachers, principals and librarians communicate more frequently.**

   Our weekly meetings have enabled the librarian, principal and three subject area teachers to communicate regularly. Because the librarian is aware of what teachers are doing in their classrooms, she has been able to pass on pertinent information about cooperative learning projects to instructors outside of the middle school. The principal's involvement has ensured the team that its efforts are understood and supported....We have seen carry over from one class to another in the students' ability to work cooperatively in groups. Metairie Park Country Day Middle School, Metairie Park, Louisiana

6. **When students work in teams, the role of the teacher changes to that of resource person and learning facilitator.**

   We have found that the student-teacher interaction changes when the students work in teams. By assisting the students in their learning, the teacher becomes not only a resource person but also a facilitator. Metairie Park Country Day Middle School, Metairie Park, Louisiana

7. **When students work in groups, the student's role changes also.**

   By learning to take responsibility for their role in the group, many students experienced positive growth. Metairie Park Country Day Middle School, Metairie Park, Louisiana

8. **Students learn to interact with people outside of the school.**

   The students were able to interact with other students, community members such as the docents at the Desert Museum, search and rescue personnel, park rangers and the personnel with Mission Wolf from Colorado. They learned about and experienced many positive activities including literature studies, environmental/endangered species research and "hands-on" experiences in our desert environment. Gridley Middle School, Tucson, Arizona

9. **The library media program is integral to the collaborative teaching model.**

   For the first time, a team of teachers focused on the Intermediate Library Media Center, working with the library staff in packaging a total program. The librarian was accepted at grade-level meetings, an event made possible through the support of TEAMS PLUS teachers. Library purchases better supported immediate curricular needs, and media center programming better reflected students' skills and classroom teaching. The learning of library skills became curriculum-driven, and the curriculum itself changed from being oriented to a single-subject to multiple-subject challenges. Show Low School, Show Low, Arizona

   In the process, the library media center has become more at the heart of the school. It is viewed as a much more integral part of the learning process. Tyner Middle School, Chattanooga, Tennessee

10. **Administrators benefit professionally from their participation in teaching teams.**

    As an administrator, I enjoyed being a teacher again, and we found that we were very successful working with small groups in research projects. Harpeth Hall School, Nashville, Tennessee

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Credits

Author: Robert Grover

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Francis Howell Junior High, St. Charles, Missouri

Show Low School, Show Low, Arizona

Odle Middle School, Bellevue, Washington

Hardin Middle School, Hardin, Montana

Harpeth Hall School, Nashville, Tennessee

Northern University Middle School, Cedar Falls, Iowa

Tyner Middle School, Chattanooga, Tennessee

Maple Elementary School, Siloam Springs, Arkansas

J.B. Martin Middle School, Paradis, Louisiana

Metairie Park Country Day Middle School, Metairie, Louisiana

Van Nuys Math/Science Magnet Middle School, Sherman Oaks, California

Gridley Middle School, Tucson, Arizona

Central Middle School, Edmond, Oklahoma

Madison Junior High, Naperville, Illinois

Healy Middle School, East Orange, New Jersey

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Proposed Academic Standards for Civics and Government

132

Pennsylvania Department of Education

XIII. TABLE OF CONTENTS

Introduction..... XIV.

THE ACADEMIC STANDARDS

Principles and Documents of Government..... 5.1.

What Government Is
Rule of Law
Principles and Ideals

Rights and Responsibilities of Citizenship..... 5.2.

Rights of Citizenship
Responsibilities of Citizenship
Civic Participation

How Government Works..... 5.3.

Separation of Powers
Elections
Forms of Government

How International Relationships Function..... 5.4.

Diplomacy
International Organizations
Political Units

Glossary..... XV.

Proposed Academic Standards For Civics and Government

XIV. INTRODUCTION

This document includes Academic Standards for Civics and Government that describe what students should know and be able to do in four areas:

- 5.1. Principles and Documents of Government
- 5.2. Rights and Responsibilities of Citizenship
- 5.3. How Government Works
- 5.4. How International Relationships Function

The Civics and Government Academic Standards describe what students should know and be able to do at four grade levels (third, sixth, ninth and twelfth).

The Pennsylvania Constitution of 1790 was the basis for the Free Public School Act of 1834 that is the underpinning of today's system of schools operating throughout the Commonwealth. These schools were created to educate children to be useful citizens, loyal to the principles upon which our Republic was founded, and aware of their duties as citizens to maintain those ideals.

The Academic Standards for Civics and Government are based on the Public School Code of 1949 which directs "... teaching and presentation of the principles and ideals of the American republican representative form of government as portrayed and experienced by the acts and policies of the framers of the Declaration of Independence and framers of the Constitution of the United States and Bill of Rights. . .". The intent of the Code is that such instruction "shall have for its purpose also instilling into every boy and girl who comes out of public, private and parochial schools their solemn duty and obligation to exercise intelligently their voting privilege and to understand the advantages of the American republican form of government as compared with various other forms of governments".

A glossary is included to assist the reader in understanding terminology contained in the standards.

Proposed Academic Standards for Civics and Government

5.1. Principles and Documents of Government

5.1.3. GRADE 3	5.1.6. GRADE 6	5.1.9. GRADE 9	5.1.12. GRADE 12
Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to. . .			
A. Describe what government is. 1.1 1.2	A. Explain the purpose of government.	A. Define and explain the major arguments advanced for the necessity of government.	A. Analyze the major arguments advanced for the necessity of government.
B. Explain the purposes of rules and laws and why they are important in the classroom, school, community, state and nation.	B. Explain the importance of the rule of law for the protection of individual rights and the common good in the community, state, nation and world.	B. Describe historical examples of the importance of the rule of law. • Sources • Purposes • Functions	B. Analyze the sources, purposes and functions of law.
C. Define the principles and ideals shaping government. • Justice • Truth • Diversity of people and ideas • Patriotism • Common good • Liberty • Rule of law • Leadership • Citizenship	C. Describe the principles and ideals shaping government. • Equality • Majority rule/Minority rights • Popular sovereignty • Privacy • Checks and balances • Separation of powers	C. Analyze the principles and ideals that shape government. • Constitutional government • Liberal democracy • Classical republicanism • Federalism	C. Evaluate the importance of the principles and ideals in civic life.
D. Identify the document which created Pennsylvania.	D. Explain the basic principles and ideals within documents of Pennsylvania government. • Charter of 1681 • Charter of Privileges • Pennsylvania Constitution • Pennsylvania Declaration of Rights	D. Interpret significant changes in the basic documents shaping the government of Pennsylvania. • The Great Law of 1682 • Constitution of 1776 • Constitution of 1790 • Constitution of 1838 • Constitution of 1874 • Constitution of 1968	D. Analyze the principles and ideals that shape the government of Pennsylvania and apply them to the government. • The Charter of 1681 • Charter of Privileges • PA Constitution, it's revisions and Amendments

Prior to any formal adoption, the State Board of Education will be soliciting additional input from across the Commonwealth on these standards.

Proposed Academic Standards for Civics and Government

E. Identify documents of United States government. • Declaration of Independence • Constitution of the United States • Bill of Rights	E. Explain the basic principles and ideals within documents of United States government.	E. Interpret the basic documents shaping the government of the United States. • Magna Carta • English Bill of Rights • Mayflower Compact • Articles of Confederation • Declaration of Independence • Federalist/anti-federalist Papers	E. Analyze the principles and ideals that shape the United States and apply them to its documents of government.
F. Explain the meaning of a preamble. • Constitution of the United States • Pennsylvania Constitution	F. Explain the meaning of the Preamble to the Constitution of the Commonwealth of Pennsylvania and compare to the Preamble of the Constitution of the United States.	F. Contrast the individual rights created by the Pennsylvania Constitution and those created by the Constitution of the United States.	F. Analyze and assess the rights of the people as listed in the Pennsylvania Constitution and the Constitution of the United States.
G. Describe the purpose of the United States Flag, The Pledge of Allegiance and The National Anthem.	G. Describe the proper use, display and respect for the United States Flag and explain the significance of patriotic activities. • Reciting The Pledge of Alliance • Standing for The National Anthem	G. Describe the procedures for proper uses, display and respect for the United States Flag as per the National Flag Code.	G. Analyze and interpret the role of the United States Flag in civil disobedience and in patriotic activities.
H. Identify a framer of the early documents of governments. • Pennsylvania • United States	H. Describe the roles played by the framers of the basic documents of governments of Pennsylvania and the United States.	H. Explain and interpret the roles of framers of basic documents of government from a national and Pennsylvania perspective.	H. Analyze the competing positions held by the framers of the basic documents of government of Pennsylvania and United States.
I. Explain why government is necessary in the classroom, school, community, state and nation and the basic purposes of government in Pennsylvania and the United States.	I. Describe and compare the making of rules by direct democracy and by representative democracy.	I. Explain the essential characteristics of limited and unlimited governments and explain the advantages and disadvantages of systems of government. • Confederal • Federal • Unitary	I. Analyze historical examples of the importance of the rule of law and of the sources, purposes and functions of law.
J. Explain the importance of respect for the property and the opinions of others.	J. Describe how the government protects individual rights and promotes the common good.	J. Explain how law protects individual rights and the common good.	J. Analyze how the law promotes the common good by protecting individual rights.

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Proposed Academic Standards for Civics and Government

K. Identify symbols and political holidays. • Pennsylvania (e.g., Charter Day, Liberty Bell, Keystone State) • United States (e.g., Presidents' Day, Statue of Liberty, White House)	K. Describe the purpose of symbols and holidays.	K. Explain why symbols and holidays were created.	K. Analyze the roles of symbols and holidays in society.
L. Identify the purpose of courts and explain how they resolve conflicts over the principles and ideals of government.	L. Explain the role of courts in resolving conflicts over the principles and ideals of government • Local • State • Federal	L. Interpret Pennsylvania and United States court decisions that have impacted the principles and ideals of government.	L. Analyze Pennsylvania and United States court decisions that have effected principles and ideals of government in civic life. • Civil rights • Commerce • Judicial review • Federal supremacy
M. Identify famous speeches and writings that reflect the basic principles and ideals of government.	M. Explain the basic principles and ideals found in famous speeches and writings.	M. Interpret the impact of famous speeches and writings on civic life.	M. Evaluate and analyze the importance of significant political speeches and writings in civic life.

Basic concepts found in lower grades for standard statements and their descriptors must be developed more fully throughout higher grade levels.

Proposed Academic Standards for Civics and Government

5.2. Rights and Responsibilities of Citizenship			
5.2.3. GRADE 3	5.2.6. GRADE 6	5.2.9. GRADE 9	5.2.12. GRADE 12
Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to. . .			
A. Identify examples of the rights and responsibilities of citizenship. • Personal rights • Political rights • Economic rights • Personal responsibilities • Civic responsibilities	A. Explain positions on issues related to rights and responsibilities of citizenship. • Political rights • Economic rights • Personal responsibilities to the individual and to society • Civic responsibilities to the individual and to society • Traits of character to individuals and to constitutional democracy	A. Analyze the essential rights and responsibilities of citizens in systems of government. • Autocracy • Democracy • Oligarchy	A. Evaluate an individual's civic rights, responsibilities and duties in systems of government.
B. Identify personal rights and responsibilities.	B. Explain the relationship between rights and responsibilities.	B. Analyze the participatory role of citizens' rights and responsibilities in local, state and national government.	B. Compare and evaluate the participatory role of citizens' rights and responsibilities
C. Identify sources of conflict and disagreement and different ways conflicts can be resolved.	C. Explain different ways of resolving conflicts in government.	C. Delineate skills used to resolve conflicts in society and government.	C. Analyze the triggers of conflict in society and techniques to resolve them.
D. Identify the importance of political leadership and public service in the school, community, state and nation.	D. Describe the importance of political leadership and public service.	D. Analyze the roles of political leadership and public service in a constitutional democracy.	D. Evaluate the roles of political leadership and public service in a constitutional democracy.
E. Describe ways citizens can influence the decisions and actions of government.	E. Identify examples of the rights and responsibilities of citizenship.	E. Explain the importance of political process to competent and responsible participation in civic life.	E. Analyze how participating in civic and political life leads to the attainment of individual and public goals. • Referendum • Recall • Petition

Proposed Academic Standards for Civics and Government

F. Explain the benefits of following rules and laws and the consequences of violating them.	F. Describe the impact of the consequences of violating rules and laws.	F. Compare the consequences of violating laws of Pennsylvania and with the consequences of violating laws of the United States.	F. Analyze the role of law for the protection of individual rights and for the common good.
G. Identify ways to participate in government.	G. Explain the importance of evaluating political decisions.	G. Contrast the difference between political and social participation in government.	G. Explain the responsibility and process to register a vote and evaluate the importance of knowledge to competent and responsible participation in civic life.
Basic concepts found in lower grades for standard statements and their descriptors must be developed more fully throughout higher grade levels.			

GGF

Proposed Academic Standards for Civics and Government

5.3. How Government Works			
5.3.3. GRADE 3	5.3.6. GRADE 6	5.3.9. GRADE 9	5.3.12. GRADE 12
Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to. . .			
A. Identify the elected representative bodies responsible for making local, Pennsylvania and United States laws.	A. Describe the structure, organization and operation of the local, state and national governments.	A. Explain the structure, organization and operation of the local, state and national governments including domestic and national policy-making.	A. Analyze and evaluate the structure, organization and operation of the local, state and national governments including domestic and national policy-making.
B. Identify the role of the three branches of government. • Executive • Legislative • Judicial	B. Describe the responsibilities and powers of the three branches of government. • Checks and balances • Separation of powers	B. Compare the responsibilities and powers of the three branches within the national government.	B. Analyze the responsibilities and powers of the national government.
C. Identify reasons for rules and laws in the school and community.	C. Explain how government actions affect citizens' daily lives.	C. Explain how a bill becomes a law on a federal, state, and local level.	C. Summarize how a bill becomes a law on a federal, state, and local level and evaluate the process.
D. Identify services performed by the local, state and national governments.	D. Describe how local, state and national governments implement their services.	D. Explain how independent government agencies create, regulate and enforce regulatory policies. • Local (e.g., Zoning Board) • State (e.g., Pennsylvania Utilities Commission) • National (e.g., Federal Communications Commission)	D. Interpret how independent government agencies create, regulate and enforce regulations.

Prior to any formal adoption, the State Board of Education will be soliciting additional input from across the Commonwealth on these standards.

Proposed Academic Standards for Civics and Government

E. Identify positions of authority at school and in local, state and national governments.	E. Identify major leaders of local, state and national governments, their primary duties and their political party affiliation.	E. Explain how political parties, campaigns and elections provide opportunities for citizens to participate in the political process that chooses its leaders.	E. Analyze the roles of political parties in election campaigns.
F. Explain what an election is.	F. Describe the voting process. • Pennsylvania • United States	F. Explain the election process. • Voter registration • Primary Elections • Caucuses • National Conventions • General Elections • Electoral College	F. Analyze elements of the election process. • Voter Registration • Primary Elections • Caucuses • National conventions • General elections • Electoral college
G. Explain why being treated fairly is important.	G. Describe the issues of due process and judicial protection of individual rights	G. Explain the issues of due process and judicial protection of individual rights. • Equal protection • Habeas Corpus • Presumption Of Innocence • Right To Counsel • Trial By Jury • Right Against Self Incrimination • Double Jeopardy • Right Of Appeal	G. Analyze judicial protection of individual rights and due process.
H. Identify individual interests and explain ways to influence others.	H. Identify individual interests and how they impact government.	H. Analyze how interest groups provide opportunities for citizens to participate in the political process.	H. Evaluate the impact of interest groups on the political process.
I. Explain why taxes are needed and who needs to pay them.	I. Describe why and how government raises money to pay for its operations and services.	I. Analyze the issues of how and why government should raise money to pay for its operation and services.	I. Evaluate how and why government should raise money to pay for its operations and services.
J. Identify the role of the media in society.	J. Describe the influence of media in reporting issues.	J. Analyze the importance of freedom of the press and how public officials use the media to communicate with their citizens.	J. Evaluate the role of media on political life in the United States and explain the role of the media in setting the public agenda.

Prior to any formal adoption, the State Board of Education will be soliciting additional input from across the Commonwealth on these standards.

Proposed Academic Standards for Civics and Government

K. Identify different ways people govern themselves.	K. Describe forms of government. • Limited • Unlimited	K. Identify and explain systems of government. • Autocracy • Democracy • Oligarchy	K. Evaluate the strengths and weaknesses of various systems of government. • Autocracy • Democracy • Oligarchy
Basic concepts found in lower grades for standard statements and their descriptors must be developed more fully throughout higher grade levels.			

Proposed Academic Standards for Civics and Government

5.4. How International Relationships Function			
5.4.3. GRADE 3	5.4.6. GRADE 6	5.4.9. GRADE 9	5.4.12. GRADE 12
Pennsylvania's public schools shall teach, challenge and support every student to realize his or her maximum potential and to acquire the knowledge and skills needed to. . .			
A. Recognize that the world is divided into various political units.	A. Describe the concept that nation-states coexist in a world community.	A. Explain and assess the role of the United States in world affairs.	A. Analyze the United States' interaction with other nations and governmental groups in world events.
B. Recognize that every nation's government is unique and each makes decisions in different ways influenced by customs and traditions.	B. Explain the concept of popular sovereignty over a defined territory and the interaction between nation-states.	B. Explain how foreign groups and nations and their policies affect the United States.	B. Analyze the impact of economic, technological or cultural developments on the government of the United States and the governments of other nations.
C. Identify ways in which countries interact with the United States.	C. Describe the governments of the countries bordering the United States and their relationships with the United States.	C. Explain the effects that United States political ideas have had on other nations – past, present and future.	C. Analyze how the United States' policy interests and historic policy positions have changed over time. • Past • Present • Future
D. Define diplomacy and treaties.	D. Describe the process that results in a treaty or agreement between the United States and another nation state.	D. Explain and contrast the functions of the three branches of federal government in foreign policy.	D. Evaluate the development and implementation of foreign policy.
E. Identify how nations work together to solve problems.	E. Explain how nations work together on common environmental problems, natural disasters and trade.	E. Explain the development and the role of the United Nations and other international organizations, both governmental and non-governmental.	E. Analyze the purposes and functions of international organizations. • Governmental (e.g., NATO, World Court, OAS) • Non-governmental (e.g., International Red Cross, Amnesty International, World Council of Churches)

Proposed Academic Standards for Civics and Government

XV. GLOSSARY

Amendment (Constitutional):	Changes in, or additions to, a constitution. Proposed by a two-thirds vote of both houses of Congress or by a convention called by Congress at the request of two-thirds of the state legislatures. Ratified by approval of three-fourths of the state.
Articles of Confederation:	First frame of government of the United States, 1781. Created a weak national government, replaced in 1789 by the Constitution of the United States.
Authority:	Right to control or direct the actions of others, legitimized by law, morality, custom or consent.
Autocracy:	A government in which one person possesses unlimited power.
Bill of Rights:	First Ten Amendments to the Constitution. Ratified in 1791, these amendments limit government power and protect basic rights and liberties of individuals.
Checks and Balances:	Constitutional mechanisms that authorize each branch of government to share powers with the other branches and thereby check their activities. For example, the president may veto legislation passed by Congress, the Senate must confirm major executive appointments and the courts may declare acts of Congress unconstitutional.
Citizen:	Member of a political society who therefore owes allegiance to and is entitled to protection by and from the government.
Citizenship:	Status of being a member of a state; one who owes allegiance to the government and is entitled to protection by and from the government.
Civic Responsibilities:	Concerns obligation to take part in the governance of the school, community, tribe, state or nation.

Proposed Academic Standards for Civics and Government

Civil Law:	Body of law, distinguishable from criminal law, which governs private rights of individuals.
Civil Liberties:	Areas of personal freedom with which governments are constrained from interfering.
Civil Rights:	Protections and privileges given to all United States citizens by the Constitution and Bill of Rights.
Classical Republicanism:	Refers to government that seeks the public or common good rather than the good of a particular group or class of society.
Common Law:	Body of unwritten law developed in England from judicial decisions based on custom and earlier judicial decisions; constitutes the basis of the English legal system and became part of American law.
Common or Public Good:	Benefit or interest of a politically organized society as a whole.
Compromise:	An amicable agreement to settle differences; mutual concessions.
Concurrent Powers:	Authority that may be exercised by both the federal government and the state governments (e.g., levying taxes, borrowing money, spending for the general welfare).
Confederal:	Relating to a confederation.
Confederation:	A loose union of individual states connected by a weak or non-existent central government.
Consent of the Governed:	Agreement by the people to set up and live under a government. According to the natural rights philosophy, all legitimate governments must rest on the consent of the governed.
Constitutionalism:	Idea that the powers of government should be distributed according to a written or unwritten constitution and that those powers should be effectively restrained by the constitution's provisions.

Proposed Academic Standards for Civics and Government

Delegated Powers:	Powers granted to the national government under the Constitution as enumerated in Articles I, II and III.
Democracy:	Form of government in which political control is exercised by all the people, either directly or through their elected representatives.
Diplomacy:	The art and practice of conducting negotiations between nations.
Diplomat:	One employed or skilled in conducting negotiations between nations.
Diversity:	State of being different; variety.
Documents of Government:	Papers necessary for the organization and powers of government.
Due Process of Law:	Right of every citizen to be protected against arbitrary action by government.
Enumerated Powers:	Powers that are specifically granted to Congress by Article I, Section 8 of the Constitution.
Equality:	The condition of possessing substantially the same rights, privileges and immunities, and being substantially responsible for the same duties as other members of society.
Federal Supremacy Clause:	Article VI of the Constitution provides that the Constitution and all federal laws and treaties shall be the "Supreme Law of the Land." Therefore, all federal laws take precedence over state and local laws.
Federal System (or Federalism):	Form of political organization in which governmental power is divided between a central government and territorial subdivisions (e.g., in the United States - the national, state and local governments).
Federalism:	The distribution of power in a government between a central authority and states and the distribution of power among states with most powers retained by central government.

Proposed Academic Standards for Civics and Government

Foreign Policy:	Actions of the federal government directed to matters beyond United States' borders, especially relations with other countries.
Government:	Institutions and procedures through which a territory and its people are ruled.
Habeas Corpus:	Court order demanding that the individual in custody be brought into court and shown the cause for detention. Habeas corpus is guaranteed by the Constitution and can be suspended only in the case of rebellion or invasion.
Individual Responsibility:	Fulfilling the moral and legal obligations of membership in society.
Individual Rights:	Privileges possessed by individuals as opposed to those privileges claimed by groups.
Interest Group:	Organized body of individuals who share same goals and try to influence public policy to meet those goals.
International Organizations:	Groups formed by nation-states to achieve common political, social or economic goals.
Judicial Power:	Authority to manage conflicts about the interpretation and application of the law.
Judicial Review:	Doctrine that permits the federal courts to declare unconstitutional, and thus null and void, acts of the Congress, the executive branch and the states. The precedent for judicial review was established in the 1803 case of *Marbury v. Madison*.
Justice:	That which may be obtained through fair distribution of benefits and burdens, fair correction of wrongs and injuries, or use of fair procedures in gathering information and making decisions.
Leadership:	State or condition of one who guides or governs.
Liberal Democracy:	Government that recognizes that the individual has rights that exist independently of government and which ought to be protected by and against government.

147

Proposed Academic Standards for Civics and Government

Liberty:	Freedom from restraint under conditions essential to the equal enjoyment of the same right by others.
Majority Rule:	Decision by more than half of those participating in the decision-making process.
Marshall Plan:	U.S. foreign policy, named after Secretary of State, George C. Marshall, which gave substantial aid to Western European countries after World War II (1948-52) to rehabilitate their economies and ensure the survival of democratic institutions.
Minority Rights:	Opportunities that a member is entitled to have, or to receive from others within the limits of the law, even though he/she may not be part of the controlling group.
Nation-State:	Divisions of the world in which each state claims sovereignty over defined territory and jurisdiction over everyone within it. These states interact using diplomacy, formal agreements and sanctions that may be peaceful or may involve the use of force.
NATO:	North Atlantic Treaty Organization, an international transatlantic partnership consisting of various European states, the United States and Canada, which was designed through cooperation, consultation and collective defense to maintain peace and promote stability throughout Europe.
Non-governmental Organization:	A group in a free society that is not a part of any government institution and does not derive its power from government.
OAS:	Organization of American States, an international governmental organization formed by the states of North and South America for security and the protection of mutual interests.
Oligarchy:	A government in which a small group exercises control, especially for corrupt and selfish purposes.
Patriotism	A feeling of pride and respect in one's country.

Proposed Academic Standards for Civics and Government

Political Efficacy:	Belief that one can be effective and have an impact on public affairs.
Political Party:	Any group, however loosely organized, that seeks to elect government officials under a given label.
Political Rights:	Entitlement to participate in the political process.
Popular Sovereignty:	The concept that ultimate political authority rests with the people to create, alter or abolish governments.
Presumption of Innocence:	The legal concept that a criminal defendant is not guilty until the prosecution proves every element of the crime, beyond a reasonable doubt.
Privacy:	The right to be left alone; the right of an individual to withhold one's self and one's property from public scrutiny if one so chooses.
Public Service:	Action of benefit to local, state or national communities through appointed or elected office.
Representative Democracy:	Form of government in which power is held by the voters and is exercised indirectly through elected representatives who make decisions.
Republic:	Form of government in which political control is exercised through elected representatives.
Republican Government:	System of government in which power is held by the voters and is exercised by elected representatives responsible for promoting the common welfare.
Right Against Self-Incrimination:	Individual right found in the Fifth Amendment to the Constitution that prevents an individual from being forced to testify against himself or herself.
Right of Appeal:	The right to seek review by a superior court of an injustice done or error committed by an inferior court, whose judgment or decision the court above is called upon to correct or reverse.

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